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**INTERNATIONAL COMPARATIVE RESEARCH:  
UNDER-REPRESENTED GROUPS IN  
TERTIARY EDUCATION**

**CANADIAN REPORT**

**(Final Report)**

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## 1. THE STRUCTURE OF EDUCATION IN CANADA

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Education in Canada is the responsibility of each of the 10 provinces and two territories. Therefore, while educational structures and institutions across the country are similar in many ways, they have been developed by each jurisdiction to respond to the particular circumstances and historical and cultural heritage of the population they serve. The chart opposite shows the various structures of education and training in Canada today.

### Pre-elementary programs

Most provinces and territories offer pre-school programs or kindergartens that are operated by the local education authorities, providing one year of pre-grade 1 education to five-year-olds.

### Elementary and secondary education

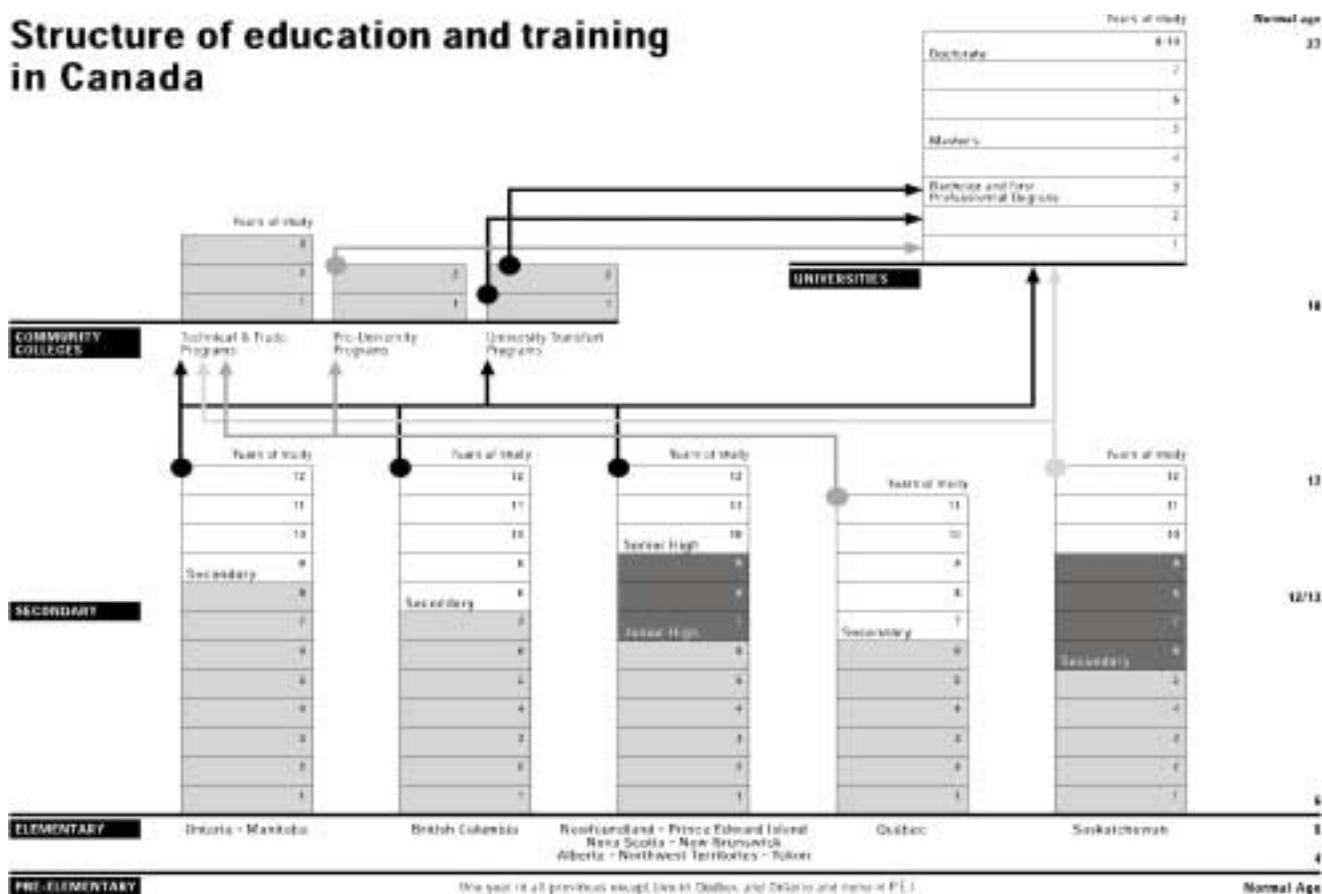
Public education is provided free to all Canadian citizens and permanent residents until the end of secondary school – normally at age 18. The ages of compulsory schooling vary from one jurisdiction to another; generally, schooling is required from age 6 or 7 to age 16. Elementary schools in most jurisdictions cover the first six to eight years of compulsory schooling. Afterwards, children proceed to a secondary education program. A great variety of programs – vocational (job training) as well as academic – are offered at the secondary level. Secondary school diplomas are granted to students who pass the compulsory and optional courses of their programs. The point of transition from elementary to secondary school may vary from jurisdiction to jurisdiction. The elementary-secondary continuum can be broken up into schools that group, for example, kindergarten to grade 6, grades 7 to 9 (junior secondary or intermediate), and grades 10 to 12 (senior secondary). In Quebec, secondary schooling ends after 11 years of study. In Ontario at present, students must complete six Ontario Academic Credit courses in order to be admitted to a university program. They can complete these requirements during the four-year secondary school program or during an additional year after grade 12.

### Postsecondary education

Once secondary school has been successfully completed, students may apply to a college or a university, depending on the jurisdiction and on whether they qualify. Postsecondary education is available in both government-supported and private institutions, some of which award degrees. After completing 11 years of schooling, Quebec students must obtain a diploma from a *cégep* (*collège d'enseignement général et professionnel*) in order to continue to the postsecondary level. *Cégeps* offer both a general program that leads to university admission and a professional program that prepares students for the labour force.

Figure 1

## Structure of education and training in Canada



Colleges, such as technical and vocational institutes, community colleges, *cégeps*, and institutes of technology, offer programs for continuing education and for developing skills for careers in business, the applied arts, technology, social services, and some health sciences. Programs vary in length from six months to three years. In general, colleges award diplomas or certificates only; they do not award degrees. However, the British Columbia community college system allows students to complete two years of academic course work toward bachelor's degrees. Thus, while some students may decide not to continue, others have the opportunity to complete the third or fourth years at a university-college or university, and receive a degree. In many provinces, the transfer is not automatic. In these provinces, students must apply for admission and have their college studies evaluated before being granted credit for completed college courses. Programs leading to degrees are offered in universities or degree-granting institutions. Most Canadian universities, especially those in the larger cities, offer a complete range of programs.

Others are more specialized, and have developed areas of excellence. There are some specialized institutions that are not campus-based that offer university programs through correspondence courses and distance education. It is possible to study at three different levels, leading to either a bachelor's, master's, or doctoral (Ph.D.) degree. Not all universities offer graduate studies (master's and doctorates). In addition to degree

programs, most universities offer diploma and certificate programs. These programs can be at either the undergraduate or graduate level, and can range from one to three years in duration.

### Number of institutions\*, by level, Canada, provinces and territories, 1993-1994

Jurisdiction Instance	Total	Elementary Primaire	Secondary Secondaire	College** College**	University Université
Canada	16 233	12 441	3 509	206	77
NF	508	367	128	12	1
PE	73	52	18	2	1
NS	553	385	146	9	13
NB	454	333	108	8	5
QC	3 138	2 285	751	94	8
ON	5 744	4 469	1 222	32	21
MB	857	679	162	9	7
SK	957	800	152	1	4
AB	1 813	1 409	377	18	9
BC	2 022	1 566	429	19	8
YK	32	25	6	1	0
NT	78	67	10	1	0
Overseas/Outre-mer	4	4	0	0	0

N.B. Includes public and private institutions  
N.B. Comprend les établissements publics et privés

Source: Statistics Canada, *Education in Canada, 1995*  
Source: Statistique Canada, *L'éducation au Canada, 1995*

\* Because of differences in definitions, the numbers reported here may differ from those quoted in provincial and territorial documents.

\*\* En raison des différences entre les définitions utilisées, les chiffres dans ce graphique peuvent être différents de ceux qui figurent dans les documents provinciaux et territoriaux.

\*\* 1992-93 data; 1993-94 data are not available

\*\* Données de 1992-1993; les données de 1993-1994 ne sont pas disponibles

## **Schools and postsecondary institutions**

In 1996-1997, there were approximately 16,000 elementary and secondary schools in Canada, representing only a slight increase from 1995-1996. More than 95% of these schools had an enrolment of less than 1,000 students.

In 1996-1997, Canada had 204 colleges and most of these (90%) had an enrolment of less than 5,000 students.

Universities generally tend to be larger than other educational institutions. Of the 77 universities in Canada in 1996-1997, only 43 had an enrolment of less than 5,000 students. Twenty-five universities had more than 10,000 full-time students, compared with only three colleges. At the other end of the spectrum, about 20% of universities and degree-granting institutions were small, with enrolments of less than 300 students. These institutions tend to specialize in one discipline, the most common being theology.

Since elementary-secondary education is compulsory in all jurisdictions at least up to the age of 16, the capacity of the elementary-secondary school system in each jurisdiction, and in turn the number of schools is largely dependent on the size of the school-aged population. Schools open and close over time and this varies by jurisdiction. Comparing overall counts of schools by jurisdiction at different time points reveals only the net change, and does not reveal the extent to which schools are closed and new schools are opened within jurisdictions to replace obsolete facilities and to accommodate population shifts.

With declines in the youth population projected for many jurisdictions, or areas within jurisdictions, some school districts will find themselves with schools that are not filled to capacity. Given fiscal constraints, school districts will need to plan carefully for anticipated growth and shrinkage in the student base and come up with alternative uses for underutilized or empty schools. At the postsecondary level, the number and size of educational institutions (and consequently the programs and courses offered) are more a reflection of demand. Postsecondary institutions must remain attentive to student and labour market demands, not only in the type of courses and programs offered, but also in how they are delivered. With advances in technology, such as the Internet, video-conferencing and other forms of electronic communication, long-distance and correspondence education may continue to increase in importance.

## **Education expenditures in Canada**

Comparative international data on education expenditures show that, in 1995, among G-7 countries (United States, France, Great Britain, Germany, Canada, Japan, Italy) Canada had the second highest per student expenditure, below only that of the United States. The higher expenditure of Canada and the United States partly stems from their high rates of participation in postsecondary education. Since per student costs are higher at this level, the large proportion of postsecondary students in these countries raises their overall per student costs. It is worth noting that the comparative international data used here pre-date the recent decrease in education spending in Canada.

In 1995, spending on education as a percentage of public expenditures ranged from 9.7% in Nova Scotia to 16.9% in Newfoundland and Labrador. The percentage of public

spending devoted to education was below the OECD average in six of the 12 jurisdictions in Canada.

Over the past ten years, debt levels among postsecondary students and recent graduates have risen substantially. While the percentage of graduates who relied on government student loan programs to help finance their education has remained just under 50%, those who do borrow are accumulating larger debt loads, and are paying them off over a longer period. In 1997, two years after graduation, those with loans owed on average \$8,300 – more than twice the amount of nine years earlier.

## **Some descriptive data**

### **Full-time postsecondary enrolment**

Full-time postsecondary enrolment reached 983,900 in 1998-1999. In 1998-1999, 41% of full-time postsecondary students were enrolled in community colleges; the rest, in universities.

### **Full-time college enrolment**

College postsecondary enrolments continue to increase. In 1998-1999, 403,500 students were enrolled of which 104,600 (26%) were university transfer students.

### **Part-time college enrolment**

In 1998-1999, approximately 91,400 students were enrolled part time in college postsecondary programs. About 59% of 1998-1999 part-time students were women.

### **Full-time university enrolment**

Full-time university enrolment reached 580,400 in 1998-1999.

### **Undergraduate**

In 1998-1999, 500,950 students were enrolled full time in university undergraduate programs. Of these, 56% were women. Full-time undergraduate enrolment as a proportion of the 18-21 age group (regardless of the student's age) was 30.6% in 1998-1999, compared with 31.8% in 1994-1995. In relation to the 18-21-year-old population, undergraduates aged 18-21 decreased from 17.5% in 1994-1995 to 17.3% in 1998-1999.

### **Graduate**

Full-time graduate enrolment grew throughout the eighties. In 1998-1999, full-time graduate students numbered 79,400. In 1998-1999, 48% of graduate students were women, up from 44% in 1994-1995. As a percentage of the 22-24 age group, graduate enrolment (regardless of the student's age) was 6.5% in 1998-1999, compared with 6.0% in 1994-1995.

### **Foreign students**

In 1995-1996, there were 72,700 foreign students studying in Canada, 43% of them at the university level, 36% at the elementary-secondary level, and 21% at the college/trade level.

In university undergraduate programs the number of foreign students reached an all-time high of 26,400 in 1983-1984, and then dropped to 16,700 in 1987-1988. By 1998-1999, the enrolment increased to 22,200. In 1998-1999, 13,400 foreign students were enrolled in graduate programs, down 900 from 14,300 in 1994-1995.

### **References**

Council of Ministers of Education (Canada), *Education Indicators in Canada 1996*  
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<http://www.cmec.ca/stats/pceip/1999/Indicatorsite/pdfs/index.stm>

Statistics Canada, *Education in Canada 2000* (Catalogue no. 81-229-XIB)  
<http://dsp-psd.pwgsc.gc.ca/Collection-R/Statcan/81-229-XIB/0000081-229-XIB.pdf>

## **2. DESCRIPTIVE AND STATISTICAL DATA ABOUT ACCESS TO POST-SECONDARY EDUCATION BY THE TARGET GROUPS**

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Most of the data presented in this section come from Statistics Canada, the national central bureau of statistics in Canada. For the purposes of this report, it is worth noting that a certain amount of experts' comments, which come from the documents from where the data is derived, have been taken verbatim. Furthermore, the available sources of information were not helpful in distinguishing the data according to the length of the educational programs. Therefore, in the following tables, the data pertaining to college education covers both general programs (two years) and professional programs (three years). Taking this into account, no distinction could be made between the types of programs given the levels of academic data. The "university" category is therefore a very heterogeneous group since it contains data coming from certificate programs of 30 credits (1 year) as well as from bachelor programs (3 to 4 years), master's (2 years) and doctorates (4 to 5 years).

### **Contextual data**

We are at first reporting general information regarding the profile of the Canadian population as a point of reference for the data concerning the five target groups (low income or low socio-economic status groups, first generation entrants, ethnic minorities and refugees, students with disabilities, and mature students) which will be presented later in this report.

According to the 2001 census (see Table 1), the Canadian population is estimated at more than 31 million inhabitants out of which there are 6.4% people between the ages of 15 and 19, 6.4% from 20 to 24 years old and 64.2% from 25 years of age and older. Consisting mostly of Caucasians (86%), the population also includes 3% of people of Chinese origin, nearly 3% of Aboriginal persons (North American Indian, Métis or Inuit), 2.4% from South Asia and 2% Blacks (Haitian or Jamaican). The other ethnic groups represent less than 1% of the population each (see Table 3, 1996 Census). The mother tongue of the inhabitants is mostly English, at 59% and French (23%) (see Table 4). Based on the *2001 Labour Force Survey* (see Table 5), 49% of the population has a post-secondary diploma and another 7% of the population has undertaken post-secondary studies but have not, however, completed these studies.

**Table 1 – Population by age group, Canada, 2001**

Age group	Percentage
0-4	5.2%
5-14	17.8%
15-19	6.4%
20-24	6.4%
25-44	29.5%
45-64	22.7%
65 or over	12.0%
Population size (October 2001): 31,136,393	

**Source:** Statistics Canada, *Population Projections for Canada, Provinces and Territories, 2000-2026* (Calculated from Table A3, p.153 (Projection 2 – Medium Growth))

**Table 2 – Economic situation, Canada**

Average personal income (1998)	\$25,784
Unemployment rate (October 2001)	7.3%
Poverty rate (1998) (a)	11.8%

**Source:** Statistics Canada, *Income in Canada, 1999*

**Note: (a)** The poverty rate is defined using Statistics Canada's low income cut-offs, which use baseline data from the *1992 Survey of Consumer Finances* to determine what households fall below an income level "at which a family is likely to spend significantly more of its income on food, shelter and clothing than the average family". In 1999, a family of four living in a large metropolitan area with an after-tax income of less than 28,392 \$ is considered low-income, as is the same family in a rural community with after-tax income of less than 18,615 \$.

**Table 3 – Population by ethnocultural background, 1996**

<b>Ethnocultural background</b>	<b>Percentage</b>
White	86.0%
Chinese	3.0%
Aboriginal	2.8%
South Asian	2.4%
Black	2.0%
Arab/West Asian	0.9%
Filipino	0.8%
Southeast Asian	0.6%
Latin American	0.6%
Korean	0.2%
Japanese	0.2%
Visible minority, n.i.e. (a)	0.2%
Multiple visible minority	0.2%

**Source:** Statistics Canada, *1996 Census* (population size: 28,528,125)

**Notes:**

**(a)** Not included elsewhere

**Ethnic origin** refers to the ethnic or cultural group(s) to which the respondent's ancestors belong (not the language they spoke). An ancestor is someone from whom a person is descended and is usually more distant than a grandparent. Other than Aboriginal persons, most people can trace their origins to their ancestors who first came to this continent. Ancestry should not be confused with citizenship or nationality.

The *Employment Equity Act* defines **visible minorities** as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour".

**Table 4 – Population by mother tongue, 1996**

<b>Mother tongue</b>	<b>Percentage</b>
<b>Unique responses:</b>	98.6%
English	59.2%
French	23.3%
Chinese	2.5%
Italian	1.7%
German	1.6%
Polish	0.7%
Spanish	0.7%
Portuguese	0.7%
Punjabi	0.7%
Ukrainian	0.6%
Arabic	0.5%
Dutch	0.5%
Cree	0.3%
Inuit	0.1%
Others	5.5%
<b>Multiple responses:</b>	1.4%

**Source:** Statistics Canada, *1996 Census* (population size: 28,528,125)

**Note:** The mother tongue is the first language learned at home in childhood and still understood by the individual at the time of the census.

**Table 5 – Education attainment of adult population (aged 25 or over), 2001**

<b>Education attainment</b>	<b>Percentage</b>
0-8 years	10.8%
Some secondary school	13.4%
Secondary school graduate	19.8%
Some post-secondary education	6.9%
Post-secondary certificate	31.0%
University degree – bachelor's	12.2%
University degree – post-graduate	5.9%

**Source:** Statistics Canada, *Labour Force Survey*, special tabulation (October 2001)

**Note:** Data refer to the highest grade or year of elementary or secondary school attended, or to the highest year of university or other non-university education completed.

According to Statistics Canada, "Of all Canadians aged 18 to 21 in 1998 and no longer in high school, approximately 65% had enrolled in post-secondary education at some point during the previous five years. The highest level pursued by those who participated in post-secondary education was university for about 43%, college for 49%, and trade/vocational training for 9%." (See Table 6)

**Table 6 – Post-secondary participation rates for Canadians aged 18 to 21 and no longer in high school, by sex and level of post-secondary participation, 1998**

Post-secondary level	Women	Men	All
All levels	67%	63%	65%
University	46%	40%	43%
College	50%	46%	49%
Trade/vocational training	4%	14%	9%

**Source:** Analysis using Statistics Canada's *Survey of Labour and Income Dynamics*, 1993 to 1998

**Notes:**

**Post-secondary participation** is defined as respondent's enrolment in a university, community college, institute of applied arts and technology, *cégep*, or trade/vocational school at any time during their participation in the survey from 1993 to 1998.

**College participation** is defined as enrolment in a community college, institute of applied arts and technology, or *cégep* during the same period. Business/commercial schools are not included in the definition of post-secondary education.

For students involved in more than one type of post-secondary education, only the highest level was examined.

**Table 7 – Distribution of Canadians aged 18 to 21 in 1998, by highest level and status of education**

Highest level of education	Education status in 1998		
	Currently enrolled	Not currently enrolled	
		Graduate	Leaver
High school	12.6%	17.8%	11.5%
University	20.8%	3.2% (a)	6.9% (a)
Other post-secondary (b)	25.9%		
All levels (c)	59.3%	21.0%	18.5%

**Source:** Analysis using Statistics Canada's *Survey of Labour and Income Dynamics*, 1993 to 1998

**Notes:**

(a) Because of high sampling variability, it was not possible to present separate values at the university and other post-secondary levels for graduates and leavers who were not currently enrolled.

(b) Includes community colleges, institutes of applied arts and technology, *cégeps* and trade/vocational institutes.

(c) Education status was unknown for 1.3% of respondents. Values do not add up to 100% because of rounding.

## **References**

Canadian Association of University Teachers (CAUT), *Almanac of Post-Secondary Education in Canada*, 2002 (Tables 1, 2, 3, and 5)

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Statistics Canada, *Post-secondary participation: the effects of parents' education and household income*, Education Quarterly Review, Vol. 8, no. 3, 2002 (Tables 6 and 7)

<http://estat.statcan.ca/content/english/articles/other/other-edu8.pdf>

## Low income or low socio-economic status groups

In 1998, 39% of the 18 to 21 year olds of the population from top quartile income families have attended university at one point or another in their lives, which represents a participation rate that is two times higher than those people from the same age group belonging to a lower quartile income (19%) (see Table 1.1). However, the pursuit of a college education among people from 18 to 21 years of age remains unchanged in all classes of family incomes (29%).

**Table 1.1 – Post-secondary education participation and family after-tax income, 18- to 21-year-olds, 1998**

Highest level of education participated	Lowest quartile	Middle half	Highest quartile	Average
All post-secondary (a)	56.1%	62.2%	69.7%	62.7%
University	18.8% (b)	27.5%	38.7%	28.4%
College (c)	28.8%	28.8%	28.3%	28.7%

**Source:** Statistics Canada, *Survey of Labour and Income Dynamics*, 1998

**Notes:**

- (a) Includes universities, community colleges, institutes of applied arts and technology or *cégeps* as well as trade/vocational schools, but excludes business/commercial schools.
- (b) Estimates with relatively high sampling variability.
- (c) Includes community colleges, institutes of applied arts and technology or *cégeps*.

**Household income** is defined as the annual after-tax income at the time the respondent was 16 years of age and living with his or her parents (expressed in terms of 1998 constant dollars).

**Values of quartiles:** "lowest quartile" is \$33,000 or less, "middle half" is \$33,000-\$67,000 and "highest quartile" is \$67,000 and more.

University participation rates of 18- to 21-year-olds increased for all socio-economic categories during the period 1986-1994. As mentioned in *The price of knowledge*, the main change seen in Table 1.2 is the rapid increase to the number of registrations in the middle group. In 1986, this group showed a participation rate just a little higher than the rate for the lowest group. By 1994, a considerable gap was separating the two groups. For the low-income family group, the participation rate rose from 13.7% to 18.3% (an increase of 33.5%), while the participation rate for the average-income family group jumped from 14.5% to 25.3% (an increase of 74.5%). The data show that the gap between the lowest socio-economic status (SES) and the middle SES widened between 1986 and 1994, while the gap between the middle SES and the highest SES narrowed. Although the gap between the highest SES and the lowest SES increased in absolute numbers (the participation rate for the highest SES rose by 7.3 points, compared to 4.6 points for the lowest SES), it was less pronounced in relative terms (the rate increased by 33.5% for the lowest SES and just 22% for the highest SES). Lastly, none of these gaps were caused by a drop in the participation rate of any group. They stem instead from different rates of increase, a less disquieting phenomenon.

**Table 1.2 – University participation rate of 18- to 21-year-olds by socio-economic status (SES) of family**

	<b>Lowest SES</b>	<b>Middle SES</b>	<b>Highest SES</b>
<b>1986</b>	14.0%	15.0%	33.0%
<b>1994</b>	18.0%	25.0%	40.0%
<b>1998</b>	18.5% (a)	27.5% (a)	38.5% (a)

**Sources:** Statistics Canada, *General Social Survey*, 1986 and 1994  
 Statistics Canada, *Survey of Labour and Income Dynamics*, 1998

**Notes:**

(a) Estimate

**University participation rate** is defined as a percentage of the 18- to 21-year-old population who have had at least some university education at the time of the interview.

**Family socio-economic status** is operationally defined as the Blishen socio-economic index for fathers' occupations when respondents were 15 years old. The young people are divided into three SES groups: those whose fathers' occupations fall into the highest quartile of the Blishen index; those whose father's occupations fall into the middle half of the Blishen index; and those whose father's occupations fall into the lowest quartile of the Blishen index (including those who did not have a father or father substitute at age 15 or those whose fathers were not employed).

For details on the **Blishen index**, see: Blishen, Bernard R. et al. *The 1981 socioeconomic index for occupations in Canada*, Canadian Review of Sociology and Anthropology, 24 (4), 1987.

**Some findings according to a survey financed by the Council of Ontario Universities (COU):**

**Sources:** Statistics Canada's *Small Area Administrative Data* for the province of Ontario (1994, 1996, 1997, and 1998)  
 Acumen Research Group's *University Applicant Survey* (1998, 1999, 2000, and 2001)

- “Students who come from families at the lower end of the income scale are applying to universities, and in increasing numbers, over the years 1994-2001. The data cannot speak to whether, in fact, these students actually enrol at universities, whether they might leave university for financial or other reasons, and so on. (Those surveyed comprise applicants, not registrants.) One thing is clear: Ontario universities are attracting more applicants from the lower end of the income scale. (Note that, overall, university applicants tend to be above the provincial median income.)”
- “It seems that a university education is being seen increasingly as a ticket to good jobs, prosperity, etc. This pattern raises a number of important issues for universities: 1) It suggests that there will continue to be more applicants to the universities; 2) If higher proportions of students are coming from families lower in the income distribution, then higher proportions of students are likely to need direct financial aid; 3) The changing patterns of applicants may impact on the university in other way. If more students are seeing university education as a direct investment that is expected to pay off economically in the short term, then a) the bases of student satisfaction may change dramatically, and b) areas for which students do not see a direct payoff might come under increasing pressure to justify their existence.”
- “This broadening of the applicant income distribution may also indicate a change in the willingness of applicants to accumulate debt.”

**Table 1.3 – Family income of Ontario university applicants, 1998-2001  
(3 categories)**

Year	Less than \$30,000	\$30,000-\$160,000	More than \$160,000	Total
1998	21.7%	74.8%	3.5%	100.0%
1999	22.2%	74.7%	3.1%	100.0%
2000	24.7%	70.9%	4.5%	100.0%
2001	27.9%	67.3%	4.8%	100.0%
Total	24.0%	72.1%	3.9%	100.0%

**Source:** Acumen Research Group's *University Applicant Survey*, 1998-2001

**Table 1.4 – Family income of Ontario university applicants, 1998-2001  
(9 categories)**

Family income	1998	1999	2000	2001
Less than 20k	14.8%	14.4%	16.3%	20.0%
20-30k	6.9%	7.9%	8.3%	8.0%
30-40k	9.7%	8.0%	8.6%	8.1%
40-50k	9.7%	10.3%	9.6%	8.7%
50-70k	19.0%	22.1%	17.3%	18.6%
70-90k	16.2%	13.9%	14.5%	13.3%
90-120k	13.3%	14.1%	14.5%	13.9%
120-160k	6.9%	6.3%	6.3%	4.7%
More than 160k	3.5%	3.1%	4.5%	4.8%
<b>Total</b>	100.0%	100.0%	100.0%	100.0%

**Source:** Acumen Research Group's *University Applicant Survey*, 1998-2001

## **References**

Association of Universities and Colleges of Canada, *Orientations : portrait de l'université au Canada (Trends)*, 2002 (Table 1.2)

Canadian Millennium Scholarships Foundation, *The price of knowledge: Access and student finance in Canada*, First edition, 2002 (Table 1.2)

<http://www.forums.millenniumscholarships.ca/factbook/en/index.html>

Council of Ontario Universities, *The University Applicant Income Study*, 2001 (Tables 1.3 and 1.4)

[http://www.cou.on.ca/publications/briefs\\_reports/online\\_pubs/SystemReportWithLetter.pdf](http://www.cou.on.ca/publications/briefs_reports/online_pubs/SystemReportWithLetter.pdf)

Council of Ontario Universities, *University Applicant Survey 2001*

[http://www.cou.on.ca/publications/briefs\\_reports/online\\_pubs/COU Appendix C UAS 2001 Survey .pdf](http://www.cou.on.ca/publications/briefs_reports/online_pubs/COU Appendix C UAS 2001 Survey .pdf)

Statistics Canada, *Post-secondary participation: the effects of parents' education and household income*, Education Quarterly Review, Vol. 8, No. 3, 2002 (Table 1.1)

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Statistics Canada, *University education: Recent trends in participation, accessibility and returns*, Education Quarterly Review, Vol. 6, No. 4, 2000 (Table 1.2)

<http://estat.statcan.ca/content/english/articles/other/other-edu4.pdf>

## First generation entrants

In this subsection, the educational attainment of parents is used to estimate the number of first generation entrants.

“Parents’ educational attainment has remained a strong and persistent factor relating to post-secondary access. Parents with more education tend to share in their children’s intellectual pursuits and pass down skills and beliefs that are conducive to achievement. They also get more involved in their children’s education, have higher expectations for academic success, and have greater familiarity with schools and teachers and with the post-secondary education process and experience. The high value parents place on education can thus be transmitted when they actively provide their children with an environment that encourages educational attainment.” (Statistics Canada, Education Quarterly Review, Vol. 8, No. 3, 2002)

In Tables 2.1 and 2.2, parents’ education is defined as the highest level of education completed by the respondent’s parents. The educational attainment of both parents was used to derive the highest level of parents’ education. For example, if at least one parents had a university degree (regardless of the education status of the other parent), it was coded as “university degree”. University degree includes bachelor’s, master’s and PhD.

“There were no significant difference in college participation rates by level of parent’s education. However, those whose parents had a high school diploma or less were significantly more likely to go to college than to university (29% versus 17%). Conversely, young adults with university-educated parents were more likely to enrol in university than in college (49% versus 35%). The type of post-secondary education pursued by those with college-educated parents was almost equally split between college (31%) and university (29%).” (See Table 2.1)

**Table 2.1 – Post-secondary participation rates for Canadians aged 18 to 21 and no longer in high school, by parents’ education, 1998**

Level of post-secondary participation	Education level of parents		
	High school diploma or less	College diploma	University degree
Any post-secondary	52%	68%	88%
University	17%	29%	49%
College	29%	31%	35%

**Source:** Analysis using Statistics Canada’s *Survey of Labour and Income Dynamics*, 1993 to 1998

**Notes:** See notes under Table 6 for detailed definitions of levels of post-secondary participation. The category entitled “Any post-secondary” also includes the category “Trade/Vocational training” besides those of “University” and “College”.

In general, parents' education is strongly linked to the family income. It is therefore impossible to completely dissociate first generation students from those belonging to a low socio-economic group (see previous subsection). Table 2.2 shows the participation rates in post-secondary education of young adults aged 18 to 21, as found by Statistics Canada, yet all the while taking into consideration these two factors. "Parents' education appears to be a stronger influence than family income in students' pursuit of post-secondary studies. Among those with post-secondary-educated parents in the lowest income quartile, 68% participated in post-secondary education. This was well below the participation rates for those with post-secondary-educated parents in the next three quartiles (76%, 77% and 78% respectively). Of particular interest is the finding that young adults whose parents had post-secondary education (college or university) and fell in the lowest income quartile were more likely to participate in post-secondary studies themselves, compared with those whose parents were in higher income quartiles but without secondary education."

**Table 2.2 – Post-secondary participation rates for Canadians aged 18 to 21 and no longer in high school, by household income and parents' education, 1998**

Household after-tax income quartile	Parents' education	
	At least one parent with post-secondary education	No parent(s) with post-secondary education
Lowest	68%	48%
Lower-middle	76%	53% (a)
Upper-middle	77%	58% (a)
Highest	78%	56%

**Source:** Analysis using Statistics Canada's *Survey of Labour and Income Dynamics*, 1993 to 1998

**Note:** (a) Estimate.

A logistic regression model was then used by Statistics Canada to examine the relative impact of both household income and parent's education on post-secondary participation. Two findings:

- Together, household income and parents' education remain strong determinant of post-secondary participation.
- Parent's education is a strong determinant on the choice between college and university studies.

The last *First-Year University Students Survey* conducted by the Canadian Undergraduate Survey Consortium was for students in 2000-2001. Table 2.3 shows that just 30% of first year student mothers' had graduated from university, and 23% more had some post-secondary education (PSE). 35% of father's had graduated from university and another 20% had some PSE. In both cases the PSE excluded *cégep*. Just less than on-fifth of students either did not know or offered no response to the question about their parent's education.

**Table 2.3 – Parents' education**

	Percentage
<b>Mother's education</b>	
Less than high school	6%
High school or <i>cégep</i>	25%
Some post-secondary	23%
University graduate	29%
Other/don't know/no response	17%
<b>Father's education</b>	
Less than high school	8%
High school or <i>cégep</i>	19%
Some post-secondary	20%
University graduate	35%
Other/don't know/no response	19%

**Source:** Canadian Undergraduate Survey Consortium,  
*First-Year University Students Survey 2001*

Based on the *1995 School Leavers Follow-up Survey*, "nearly 80% of students who were high school graduates by 1995, had participated in some type of post-secondary education leading to a certificate, diploma, or degree. High school graduates with university educated parents had higher odds of attending university (controlling for other factors): Nearly 70% of high school graduates with university-educated parents (at least one university-educated parent) attended university, compared to 43% for those whose parents attained trade-vocational/college level (see Table 2.4). Only around 30% of graduates whose parents had high school or less participated in university education." (Statistics Canada, *Education Quarterly Review*, Vol. 5, No. 3, 1999)

**Table 2.4 – Proportion of students participating in post-secondary education, by parent's educational attainment**

Parent's education	University	College/ <i>cégep</i>	Trade- vocational	Non- attendance
Less than high school	30%	34%	* 9%	27%
High school diploma	33%	32%	7%	28%
Trade-vocational or college/ <i>cégep</i>	43%	34%	* 6%	16%
University	67%	18%	---	13%

**Source:** Statistics Canada, *1995 School Leavers Follow-up Survey*

**Notes:** "\*" stands for high sampling variability

Highest level of either the mother's or father's education was used as a single measure of parent's education.

“Logistic regression results show that students whose parents are university educated had odds 3.5 times higher for university participation versus no post-secondary participation when compared to students whose parents had high school education. These students also had odds 3 times higher for university participation versus community college when compared to students with high school educated parents. This strong effect for university participation supports the general trend found in the research literature. However, having university-educated parents did not affect the odds of college level participation and actually decreased the odds by 0.61 of pursuing trade-vocational training versus no post-secondary participation.

Having parents with college/trade-vocational education increased the odds by 2.2 of attending university versus no post-secondary participation when compared to students with high school educated parents. This same group of students had higher odds (1.8) of participating in college level education versus no participation. However, having parents with college/trade-vocational level education did not affect the odds of students pursuing trade-vocational training.

There was no difference in the odds for students whose parents has less than high-school level education compared to students with high-school educated parents for all three levels of post-secondary participation versus non participation.” (Statistics Canada, Education Quarterly Review, Vol. 5, No. 3, 1999)

As a follow-up to the *1995 School Learners Survey*, the *Youth in transition Survey* has been launched. This survey outlines the 18 to 20 year olds’ situation in terms of their studies, their level of education and their participation in the workplace in December 1999. Tables 2.5 to 2.7 show the results of this survey.

**Table 2.5 – Highest educational attainment of parents or guardians**

Parents’ highest educational attainment	High school dropouts	High school graduates
University degree	11.0%	30.6%
Post-secondary certificate/diploma	16.9%	26.0%
High school	45.2%	34.7%
Less than high school	26.9%	8.7%

**Source:** Human Resources Development Canada and Statistics Canada, *Youth in Transition Survey*, 1999

**Table 2.6 – After high school: Education status of 18-20-year-olds who were no longer in high school as of December 1999, by Gender**

Education status	Men	Women	All
High school dropouts, no PSE	14.7 %	9.1 %	11.8 %
High school graduates, no PSE	28.6 %	23.4 %	26.0 %
Post-secondary continuers	46.9 %	57.4 %	52.2 %
Post-secondary graduates	3.7 %	4.9 %	4.3 %
Post-secondary leavers	6.1 %	5.2 %	5.7 %
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>

**Source:** Human Resources Development Canada and Statistics Canada, *Youth in Transition Survey*, 1999

**Table 2.7 – Youth education status December 1999 and parental educational attainment**

Youth education status	Less than high school	High school graduate	Post-secondary certificate/diploma	University degree	Total
PSE leavers	9.9 %	33.6 %	27.2 %	29.3 %	100.0 %
PSE graduates	14.8 %	41.9 %	25.5 %	17.8 %	100.0 %
PSE continuers	7.3 %	28.6 %	27.0 %	37.1 %	100.0 %
High school graduates, no PSE	10.9 %	46.4 %	23.3 %	19.4 %	100.0 %
High school dropouts, no PSE	27.3 %	45.6 %	15.9 %	11.2 %	100.0 %

**Source:** Human Resources Development Canada and Statistics Canada, *Youth in Transition Survey*, 1999

## **References**

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<http://www.pair.ubc.ca/surveys/CUSC2001UBC.PDF>

Human Resources Development Canada and Statistics Canada, *At a Crossroads: First Results for the 18 to 20-Year-old Cohort of the Youth in Transition Survey*, 2002 (Tables 2.5, 2.6 and 2.7)

<http://www.hrdc-drhc.gc.ca/sp-ps/arb-dgra/publications/books/books.shtml>

Statistics Canada, *Determinants of postsecondary participation*, Education Quarterly Review, Vol. 5, No. 3, 1999 (Table 2.4)

Statistics Canada, *Postsecondary participation: the effects of parents' education and household income*, Education Quarterly Review, Vol. 8, No. 3, 2002 (Tables 2.1 and 2.2)

<http://estat.statcan.ca/content/english/articles/other/other-edu8.pdf>

## Ethnic minorities and refugees

Canada has relatively limited post-secondary statistics for ethnic minorities, apart from the Aboriginal population. To our knowledge, no statistics in this area have been published on refugees.

Although data on Aboriginal students is being presented in this section, it is important to note that Aboriginal persons (Indians, Métis and Inuit) are not considered Ethnic minorities. Indians, who have status as “First Nations” and the other aboriginal groups make up what is called the Northern peoples. Even if their inhabitants form a minority group on Canadian soil, they do not however represent ethnic minorities since they come from the country where they live. The presence of a federal department, the Canadian Department of Indian Affairs and Northern Development (DIAND), created to meet the specific needs of this people in terms of culture, economy and geography, offers a better explanation of the data available on these ethnic groups in the country.

As mentioned in *The price of knowledge*, “even though Aboriginal persons present lower postsecondary participation rates and educational attainment levels than do non-Aboriginal persons, the number of Aboriginal students embarking on postsecondary programs in Canada has considerably increased over the past 30 years, indeed more rapidly than in the overall population. If this success story has gone practically unnoticed, it is mainly because of the limited nature of the information sources that provide these statistics. Aboriginal students are not required to identify themselves as being Aboriginal when they register at an educational institution. Therefore, the data from institutional sources, including the data from Statistics Canada, cannot fully bring out the trends for numbers of Aboriginal students. And the only reliable sources of information on the number of Registered Indians (i.e., persons who are registered or eligible to be registered under the *Indian Act*) receiving funding from the Department of Indian Affairs and Northern Development (DIAND) are unfortunately incomplete. This is because they exclude a large number of Métis persons, Inuit persons, and non-registered Indians, all of whom are studying in Canada, nor do they include Registered Indians who do not receive funding from DIAND for their studies. (The data also present gaps for statistics from the Northwest Territories and Yukon.) Nevertheless, seeing that Registered Indians represent more than half of the Aboriginal population in Canada and that most Registered Indians who register in postsecondary programs are believed to use DIAND funding, the data provide at least a starting point for analysis. And these data indicate a remarkable evolution. At the end of the 1970s, about 4,100 Registered Indians were attending colleges or universities in Canada. In 2001, their number had jumped to almost 27,000, an increase of nearly 700%.

Four factors explain this increase:

- a) The transfer in the 1970s of responsibility for primary and secondary education to the First Nations.
- b) Increased federal funding of postsecondary students, and the creation of the Postsecondary Education Assistance Program for Canadian Indians and Inuit.
- c) The change in the total number of persons identified as Registered Indians following the extension of the definition of ‘Registered Indian’ and the revision of the *Indian Act* in 1986.

- d) The proliferation of Aboriginal studies programs in Canadian universities and the creation of the *Saskatchewan Indian Federated College* in Regina, the first post-secondary institution run by Aboriginal persons in the country.”

**Table 3.1 – Distribution of Indian students according to type of institution, 2001**

Type of institution	Percentage
University	40%
College	44%
Trade and vocational schools (mostly private)	13%
Studies in other countries	3%

**Source:** The Canadian Department of Indian Affairs and Northern Development (DIAND) database

**Note:** The data are based on actual numbers, whenever possible. However, in some cases, regional estimates are necessary, since not all Indian band councils release full information on education.

Table 3.1 shows that Registered Indians are more likely to attend colleges and trade or vocational schools than universities. In 2001, there were close to 3,500 more students in colleges and trade or vocational schools than in universities. The inverse holds in the overall population (more university students than college or trade/vocational school students). Note that there is no official source of data on Aboriginal or Métis students who are not Registered Indians. Although we know practically nothing about these student groups, we do have some data on them after they have graduated. The census data of Statistics Canada allow us to estimate the level of educational attainment of the various Aboriginal groups with a certain degree of reliability.

**Table 3.2 – Distribution of Canadians with university training (with or without a degree), 1996**

Age group	Registered Indians	Other Aboriginal Groups	Other Canadians
15-24	20%	29%	41%
25-44	49%	58%	64%
45-64	37%	47%	50%
65 and older	10%	20%	20%
<b>Total</b>	<b>37%</b>	<b>47%</b>	<b>51%</b>

**Sources:** Indian and Northern Affairs Canada, Research and Analysis Directorate (1996) and *Aboriginal Post-secondary Education and Labour Market Outcomes Canada* (1996)

Based on Census data, “the proportion of college and university grads doubles over past decade: Between 1986 and 1996, young Aboriginal adults improved their qualifications at every level of education. At one end, the proportion of young Aboriginal people (including current students) with less than a high school diploma fell from 60% in 1986 to 45% in 1996; at the other end, the share of those who completed their college education

(refers to all post-secondary, non-university diplomas or certificates) increased from 15% to 20% during the same period. Progress was also evident at the university level: the percentage of those with a degree doubled, from 2% to 4%.” (See Statistics Canada, 1999)

One should note that the total Aboriginal population increased significantly between 1986 and 1996. It jumped from 455,130 to 799,010 over that time, due in part (along with demographic factors) to the large increase in the number of persons reporting an Aboriginal identity for the 1996 census, in comparison to the 1986 census. This change is very likely due to greater awareness of Aboriginal issues. We also note that the Aboriginal population was not fully counted in either the 1986 census or the 1996 census. One hundred and thirty-six reserves and communities with a total population estimated at 44,700 did not take part in the 1986 census, and 77 reserves with a total population estimated at 44,000 did not take part in the 1996 census.

Despite these educational gains, in 1996 there were still gaps in relative attainment between Aboriginal and non-Aboriginal people aged 20 to 29 (see Table 3.3).

**Table 3.3 – Canadian people aged 20 to 29, by highest level of education completed**

Highest level of education completed	Aboriginal	Non-Aboriginal
Less than secondary	51%	23%
Secondary	14%	19%
College	18%	29%
University	3%	15%

**Source:** Statistics Canada, *1996 Census of population*

**Notes:** Data cover only the persons who were not attending school at the time of the census.

The Aboriginal population refers to those persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis, or Inuit (Eskimo) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada and/or who were members of an Indian Band or First Nation.

According to Table 3.4, the educational levels rise for both men and women: Although the educational attainment of both young Aboriginal men and women improved between 1986 and 1996, women had a somewhat higher rate of success at most levels.

**Table 3.4 – Aboriginal aged 20 to 29, by sex and by highest level of education completed**

Highest level of schooling completed	Men		Women	
	1986	1996	1986	1996
Less than secondary school	62%	48%	59%	42%
Secondary school	8%	13%	9%	11%
College	14%	19%	15%	21%
University	1%	3%	2%	5%
Incomplete post-secondary	14%	18%	16%	21%
<b>Total number of people</b>	42,110	65,385	46,800	71,595

**Source:** Statistics Canada, Censuses of Population, 1986, 1996

**Note:** Because the 1996 Census did not ask about school attendance, 1986 and 1996 data compare highest-level-of-schooling figures for everyone (including students) in the specific age group.

Statistics Canada (1999) indicated that “Métis lead the way in educational achievement. Registered Indian and Inuit students are eligible to receive grants from the Post-secondary Student Support Program, which is funded through the Department of Indian Affairs and Northern Development. Although most Métis people are not eligible for these grants, young Métis adults had the highest level of education in 1996. Two factors may have contributed to this: 1) the Métis are less likely to live in remote communities or the far North than the other two groups, and thus have better access to post-secondary institutions, and 2) the Métis have a longer history of formal education and a greater familiarity with other mainstream institutions than other Aboriginal people growing up in remote communities. Indeed, in 1996, some 21% of Métis aged 20 to 29 completed their college education compared with 17% of both North American Indian and Inuit people. Underscoring the same trend, 4% of Métis had university degrees compared with 2% of North American Indians and just under 2% of Inuit in their twenties.”

According to the *1991 Aboriginal Peoples Survey* data, Aboriginal people are in general more likely than other Canadians to return to school at older ages. The educational level of young Aboriginal adults may therefore improve as they get older. Note that the Aboriginal Peoples Survey (APS) was a large-scale survey conducted as a follow-up to the 1991 Census. Persons who reported Aboriginal ancestry on the census questionnaires were asked in the APS about their identity.

“On April 1, 1999 Nunavut, Canada’s third and newest territory, became a legal and political reality. The Northwest Territories were split, with Nunavut making up the eastern two-thirds of the area. Not only is there a small population base (approximately 25,000 people), but the educational attainment of Inuit in this territory is below that of other Aboriginal people. Nearly half (46%) of the Inuit population 15 years and over had less than grade nine education in 1996 and just over 1% had completed university. Some 34% of young adults aged 20 to 29 had less than grade nine education compared with roughly 12% of other young Aboriginal adults. At the other end of the scale, slightly more than 1% of Inuit youths had completed university compared with nearly 3% of all young Aboriginal people.” (See Statistics Canada, 1999)

The Association of Universities and Colleges of Canada (2002) mentioned that “self-identified visible minorities are also prevalent on Canadian campuses. According to the

2001 Canadian Undergraduate Survey Consortium, almost 15 percent of first-year students self-identified as visible minorities. This is almost the same share as youths who self-identified as visible minorities in the general population as reported in the 1996 census data. Moreover, census data reveal that almost all minority groups are more likely to have completed a university degree. Forty percent of Japanese, Chinese and Korean youth aged 25 to 34 have completed a university degree as compared to half this proportion in the non-minority population.

Another example of growing diversity is the significant increase in the number of international students on Canadian campuses as a result of universities' successful international student recruitment campaigns. In the fall of 2001, universities hosted a record 42,000 full-time foreign students, up by more than 30 percent in just three years. These students bring with them highly valued perspectives that broaden the experiences of all students and faculty. They also create new demands for student services on Canadian campuses. Most universities now provide one or more of the following types of services, either in whole or in part, aimed at international students: race relations committees, international student advisers, multicultural mentors, drop-in centres, cultural societies, and language and exchange programs."

## **References**

Association of Universities and Colleges of Canada, *Orientations : portrait de l'université au Canada (Trends)*, 2002

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<http://www.forums.millenniumscholarships.ca/factbook/en/index.html>

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## Students with disabilities

There exists almost no data on a national level about students with disabilities. We present, however, some information coming from two studies carried out by Mr. Jacques Tousignant from l'Université du Québec which presents the situation of handicapped people enrolled in Quebec universities.

It is not possible today to give precise data on the number of persons with significant, persistent disabilities in Quebec or on the number of persons who are severely handicapped by such disabilities. We are dealing here with a not entirely visible minority group of which, for various reasons, it is hard to get a clear picture. Moreover, there are still no common definitions or classifications for disabilities and handicaps, nor are there any systematic data-gathering structures that will allow us to establish valid comparative statistics. Determining the number of disabled persons attending university presents the same difficulties. There, more than anywhere else, disabled persons are not required to identify themselves as being disabled when they register. Also, many disabled persons consider it a matter of personal pride that they can take care of themselves despite their disability. To these reasons we must add their fear of being bracketed into categories that will devalue them and their contribution to society once they are ready for the job market. These difficulties mean that, even in the universities, we can use only approximations or rough groupings to determine the number of disabled persons.

Our first source of information is the disabled students' bursary program, which is administered by the *Ministère de l'Enseignement supérieur et de la Science*. The information held by the universities' student services departments no doubt allows for a more exact and complete view of the situation of disabled students. Indeed, these are the departments most disabled students turn to for assistance. On the other hand, all the student services directors have indicated that an unspecified number of disabled students are attending their universities, without requesting any specific support.

We also note an increase to the number of students with learning difficulties. Quebec's education department distinguishes these students and students with behavioural troubles (formerly known as 'socially maladjusted persons') from students with physical disabilities (hearing, visual, or motor). It is important to realize that learning difficulties have nothing to do with intelligence. They refer instead to difficulties in processing information. A learning difficulty stems essentially from a dysfunction in the central nervous system of a person with average or even higher than average intelligence. Such difficulties include dyslexia (reading), dysgraphia (writing) and dyscalculia (arithmetic functions). According to the Learning Disabilities Association of Quebec (LDAQ), approximately 10% of Canadians have a learning difficulty of some kind.

**Table 4.1 – Estimated number of disabled persons aged 20 to 29 in Quebec and corresponding university attendance statistics, according to disability (visual, hearing, motor), 1989**

	20-24	25-29	Total
Total for each age group (a)	567,500	621,400	1,188,900
University student population (a)	85,233	44,736	129,969
Percentage attending university	15.0%	7.2%	10.9%
Estimated number of persons with visual disabilities (0.78%) (b)	4,426	4,846	
Theoretical number of students with visual disabilities	663	348	1,011
Estimated number of persons with hearing disabilities (0.87%)	4,947	5,406	
Theoretical number of students with hearing disabilities	740	389	1,129
Estimated number of students with motor disabilities (1%+)	5,675	6,214	
Theoretical number of students with motor disabilities	851	447	1,298+

**Sources:**

- (a) *Données statistiques sur la population étudiante des universités québécoises 1971-1987*, DGERU/DPSAC, Jacques LaHaye, 1989, pp 39-40.  
 (b) Prevalence rate – See “L’intégration de la personne handicapée: État de la situation”, Les Conférences socio-économiques du Québec, Gouvernement du Québec, 1981, pp 21-29

**Table 4.2 – Number of disabled students in Quebec universities in 1989 and 1994**

Disability	Number of students in 1989	Number of students in 1994
Visual disability	+ or - 90	137
Hearing disability	+ or - 39	76
Motor disability	+ or - 125	233
Organic disability (a)	+ or - 13	79
Learning difficulties	+ or - 120	169
Multiple disabilities	+ or - 63	22
Total no. of students	+ or - 450	716

**Source:** Data come from the universities’ student services departments (only disabled students using this service are included) – Winter 1989 and Fall 1994

**Note:**

- (a) Organic disabilities: diabetes, renal disease, Chron’s disease, etc.

The overall number of students that have turned to the reception desks has gone from 450 in 1989 to 716 in 1994 (see Table 4.2). Given that the number of students enrolled in Quebec universities has remained relatively stable during this time frame (241,033 in the fall of 1988 and 244,577 in the fall of 1994), there has been a significant increase in the number of students with disabilities between 1989 and 1994.

### **References**

Jacques Tousignant, *Les personnes handicapées inscrites dans les universités québécoises : Situation et perspectives*. Ministère de l'Enseignement supérieur et de la Science, 1989 (Table 4.1)

Jacques Tousignant, *La vie étudiante des personnes handicapées dans les établissements d'enseignement universitaire québécois : Un bilan des années 1989 à 1995*. Ministère de l'Enseignement supérieur et de la Science, 1995 (Table 4.2)

## Mature students

In Canada, we cannot agree on a common definition to define the reality surrounding “adult students”. The age of admission into an undergraduate program (first degree) is one of the factors that are often taken into account for some of the few studies that deal with this issue. However, these studies are most often completed on an institutional level. On the national level, there is no control for age in the databases. The problem remains: “what constitutes an adult?” Since there are a very high percentage of adults studying on a part time basis, the number of students enrolled part time is used to give an estimate of the number of mature students attending university. Finally, the concept of an adult student is generally considered as valid only at the undergraduate level because the pursuit of studies at the graduate level is available to students whose admission age already qualifies them as “adults”.

It is worth mentioning that post-secondary institutions benefit from having elder students who contribute to provide different perspectives on campus and in class. Most of them are part-time students who carry with them a significant amount of work and life experience. As mentioned in the *Galt Global Review* (January 6, 2003), “mature students are usually very motivated to succeed in their studies and research indicates that they perform as well as – and in some cases better than – other students do. Many students possess traditional qualifications but there are an increasing number of students coming to university via non-traditional routes.”

Statistics Canada has conducted, in collaboration with Employment and Immigration Canada (in 1990 and 1992) and Human Resources Development Canada (in 1994 and 1998), the *Adult Education and Training Survey* (AETS). The main objective of this survey is to measure participation rates among adults aged 17 or over. The AETS covers learning obtained through programs as well as courses, learning which is job-related as well as that taken for personal interest, learning undertaken full-time as well as part-time, and learning that is employer-sponsored as well as non-employer sponsored. It covers training in all locations including universities and colleges, private and commercial institutions, on-site at the workplace and distance learning.

**Table 5.1 – Estimated training incidence for the non-student population aged 17 or over**

<b>Training incidence</b>	<b>1992</b>	<b>1994</b>	<b>1998</b>
Men	28.3%	27.4%	25.7%
Women	28.6%	28.7%	26.3%
All	28.4%	28.1%	26.0%

**Source:** Statistics Canada, *Adult Education and Training Survey*, 1992, 1994, 1998.

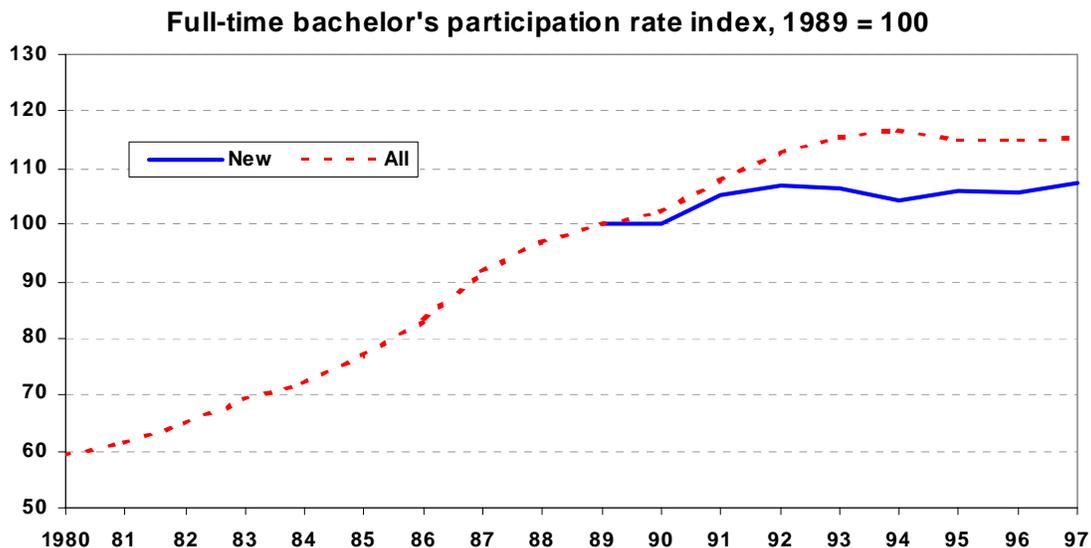
**Note:** All results are weighted to reflect the Canadian adult population exclusive of full-time and part-time students.

Table 5.1 shows a few interesting results that have been obtained by Human Resources Development Canada with the help of the AETS data (see reference above). However, these results are not representative of the adult student population as a whole, but rather of the adults who are taking job-related training. The adults who have indicated that they

were part-time or full-time students in the survey have been removed from the cross-section for analysis purposes. After further research, the various analysis reports that have been published based on AETS data seem to indicate the same results. In general, it was found that 26% of students aged 17 and older who weren't students during the 1998 survey were taking a job-related training. It is worth pointing out that this ratio was slightly higher during the previous surveys, i.e. those carried out in 1992 and 1994, which was at 28%.

We can see a constant decline of the percentage of part-time students in Canada and as a result, there are higher rates of full-time students (Figure 5.2). This does not necessarily mean that there is a decline in the number of mature students attending university. Actually, institutional analyses that have been done say this phenomenon is partly due to mature students' habit changes concerning the pursuit of an education; they choose to study on a full-time basis.

**Figure 5.2**



**Source:** Statistics Canada, *University education: Recent trends in participation, accessibility and returns*.

Let's bring this section to a close with data about the age of Canadian students, published by the Association of Universities and Colleges of Canada:

- In 2001, more than 85% of all full-time students were registered in an undergraduate university program. Six students out of seven (86%) in this level were less than 25 years old and most of them were 21 years old or younger. Therefore, students younger than 25 made up more than three quarters of the full-time university students in Canada.
- In 1998, nearly 85% of the students enrolled in community colleges were younger than 25; 68% of those students were 21 years old or younger and 16% were between the ages of 22 and 24.
- In 2001, there were 75,000 full-time students at the undergraduate level and almost as many graduates that were 25 years of age or more. As for doctorates,

most of the students are 30 years old or older due to the number of years that are required by this type of program.

- There are also many older part-time students: in 2001, there were 230,000 part-time students at the undergraduate level and the vast majority were 25 years and older. Specifically, 20% of those students were between the ages of 25 and 29, whereas 45% were 30 and older. Also noteworthy was the 400,000 or more adults enrolled in continuing education programs (which do not lead to credits).

## **References**

Association of Universities and Colleges of Canada, *Orientations : portrait de l'université au Canada (Trends)*, 2002

Human Resources Development Canada, *Adult education and training survey: Participation in adult training by Canadians in the 1990s*, 2001 (Table 5.1)

<http://www.hrdc-drhc.gc.ca/sp-ps/arb-dgra/publications/books/ir0195e.shtml>

Statistics Canada, *University education: Recent trends in participation, accessibility and returns*, 8<sup>th</sup> Annual Conference of the Canadian Institutional Research and Planning Association, October 1999, Quebec City (Figure 5.2).

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#### 4. ANNOTATED BIBLIOGRAPHY

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Acumen Research Group Inc. (2001) University Applicant Income Survey. Council of Ontario Universities.

**Utility:** Reference used for the report

**Abstract:** The Council of Ontario Universities requires accurate and recent information on the financial status of applicants to Ontario universities in order to facilitate planning and policy decisions. This study used a combination of data sources to investigate the financial status of Ontario university applicants over the years 1994-2001. This study made use of two different methods and data sources, in order to get the most information out of the available data. For the years 1994-1998, a sample of applicant postal codes (300 for each institution) was matched to Statistics Canada median total family income. For the most recent years (1998-2001), Statistics Canada data are not yet available. For these years, the family income data from Acumen Research Group's University Applicant Survey were used to investigate whether there were changes in the overall composition of the applicant pool (in terms of reported family income). This information bears on important issues such as access to higher education, government support of universities, and so on. Such information is needed for universities to plan effectively. Ultimately such information is useful to assessing funding needs of future applicants.

Andres, L. and Krahn, H. (1999) Youth pathways in articulated postsecondary systems: Enrolment and completion patterns of urban young women and men. *Canadian Journal of Higher Education* **29** (1):47-82.

**Utility:** Participation / Student success / Specific population

**Abstract:** This paper uses panel survey data to document the postsecondary educational activity of high school graduates in Edmonton and Vancouver over a five-year period. It enquires whether, in "articulated" postsecondary systems offering a range of institutional choices and a variety of transfer options, large class and gender differences in participation and completion continue to be observed. The results reveal that even in systems explicitly designed to improve access to and encourage completion of postsecondary programs, family background continues to strongly influence postsecondary outcomes. In both cities, social class advantages appear to be passed from one generation to the next, to a large extent, through the high school tracking system, since high school academic program is a strong predictor of postsecondary participation and completion. Gender also continues to matter, but in more subtle ways than in the past. Young women and men are equally likely to participate in the postsecondary system, but they continue to make different types of educational choices that, in turn, determine participation patterns and the acquisition of postsecondary credentials. The paper concludes by discussing the educational policy implications of these findings.

Andres, L. and Looker, E.D. (2001) Rurality and Capital: Educational Expectations and Attainments of Rural, Urban/Rural and Metropolitan youth. *Canadian Journal of Higher Education* **31** (2):1-45.

**Utility:** Factors related to participation / Specific population

**Abstract:** This paper uses data from two longitudinal surveys of Canadian youth to examine the effects of rural versus urban/rural and metropolitan residence on young people's educational expectations and attainments. The surveys are based in British

Columbia (B.C.) and Nova Scotia (N.S.), two provinces that have very different systems of postsecondary education. B.C. has an articulated system with formal structures which allow students to take the first two years of university study at a community college before transferring to a university. N.S. has no such formal transfer system. Its community college system is not well developed but it has a large number of universities, some of which are in rural areas. The findings show that, in both provinces, students in rural areas have lower expectations and attainments compared to other students, even when parental background, gender and academic stream are controlled. A comparison across provinces shows that rural youth in B.C. are more likely than their N.S. counterparts to pursue postsecondary education, but rural N.S. youth are more likely to have successfully completed a degree program four to five years after high school. Implications of these findings for future research as well as for policy changes in the two provinces are discussed.

Anisef, P. (1985) L'accessibilité à l'enseignement postsecondaire au Canada – Recension des ouvrages. Direction générale de l'Aide à l'éducation, Secrétariat d'État du Canada.

**Utility:** Factors related to participation

\* **Abstract:** La présente étude a été commandée en complément de l'analyse de l'Enquête auprès des étudiants du postsecondaire, qu'a réalisée Statistique Canada pour le compte du Secrétariat d'État au printemps 1984.

Excerpt from introduction: L'enseignement supérieur au Canada a connu de nombreux épisodes importants et plusieurs phases qu'il convient de noter. Jusqu'en 1940, alors que l'on en dénombre 21, les universités croissent à un rythme lent mais régulier. La Seconde Guerre mondiale ouvre une ère nouvelle en suscitant une forte demande de chercheurs scientifiques et de personnel spécialisé, ce qui donne à l'université l'occasion de démontrer son importance vitale en répondant à cette demande. Dès 1951, le gouvernement fédéral commence à assurer aux établissements d'enseignement supérieur une aide financière régulière.

Au début des années 1950, la population étudiante universitaire était à peu près deux fois supérieure à celle des années 1940. Vingt-trois ans plus tard, elle allait à nouveau doubler.

Mais ce sont sans doute les vingt dernières années qui ont constitué pour l'enseignement postsecondaire la période la plus stimulante et la plus prometteuse. Le nombre d'étudiants inscrits à plein temps à des programmes de premier cycle a triplé tandis que le nombre de ceux inscrits à temps partiel ou à plein temps à des programmes d'études supérieures a presque été multiplié par six. Statistique Canada relevait récemment que le nombre d'étudiants de niveau postsecondaire âgés de 15 à 24 ans avait augmenté d'une proportion étonnante de 26% entre 1980 et 1983, freinant ainsi la tendance à la baisse enregistrée au cours des trois années précédentes. Le montant des dépenses consacrées à l'enseignement universitaire a augmenté de 14%; en 1981-1982, 4 989 millions de dollars ont été affectés aux universités canadiennes. La croissance enregistrée dans le secteur postsecondaire non universitaire (les collèges communautaires) a été tout aussi extraordinaire.

Les politiques d'encouragement à l'enseignement supérieur, adoptées dans les années 1960, n'étaient pas simplement qu'une réaction aux pressions démographiques. Elles étaient fondées sur la conviction, partagée par les économistes, que l'enseignement supérieur menait à la productivité économique et générait des taux de rendement, et pour les personnes et pour la société, plus intéressants que toute autre forme d'investissement. (...)

Anisef, P. (1994) Learning and sociological profiles of Canadian high school student: An overview of 15 to 18 year olds and educational policy implications for dropouts, exceptional students, employed students, immigrant students and native youth. The Edwin Mellen Press. 0-7734-9347-6.

**Utility:** Student profiles

**Abstract:** In recent years, Ontario, along with the rest of the world, has undergone dramatic social, demographic, economic, technological, and structural changes. All of these have placed enormous pressure on our educational system. In part, these changes have created a growing and diverse population of students with changing individual needs. More importantly, education as a critical instrument of government policy has been forced to respond to changing labour force demands, new advocacy pressures, changing family structures, new gender roles, more widely diverse populations, and a host of other changes.

In some ways, these changes are part of a longer evolution of educational policy and practice. As a relatively young country, Canada has undergone many socio-demographic changes. In early colonization years, the population was small, consisting of mainly isolated, rural and agricultural communities. The education system at the time was not centralized, and was the responsibility of the family or the local church. As the country shifted to a more urban industrialized society, the education system was also transformed into a more standardized, uniform, state run institution. Goals were developed to socialize an increasingly culturally diverse and formerly rural population into a Western Christian industrial labour force. Literacy was seen as an answer to many social problems, and education became free and compulsory to age sixteen. More vocational schools were introduced as life and work shifted from the home to the workplace, and families no longer sufficed in preparing their children for the new types of occupational roles being introduced. Changes occurring within the system were further affected by cyclic trends of progressivism and conservatism, as the political mood and economic situation of the province shifted.

Today, as Western economies move out of the industrial era into a global age of information and technology, the educational system must respond in turn. The effects of these changes on the family, youth culture, and the labour market suggest implications for education. Additional socio-demographic factors such as population shifts, ethno-cultural diversity, poverty and changing gender roles also have an impact on the education of children and youth. This is especially relevant at the secondary level, when youth are beginning to make choices regarding their future occupational roles.

This sense of rapid change and ensuing diversity offers important insights for the context of emerging educational policy. As we review this context, we are afforded an opportunity to explore the ways in which education today can support a stronger Ontario.

Anisef, P., Baichman, E., Northrup, D., Rhyne, D. and Tibert, J. (1986) Models and methodologies appropriate to the study of outcomes of schooling in Ontario's multicultural society. Ontario Ministry of Education.

**Utility:** Methodology / Evaluation strategies

**Abstract:** The report explicates conceptual models of school outcomes and related research methodologies in order to increase an understanding of the diversity and structure of desired outcomes, to provide a context for existing findings on effective schools, and to provide materials useful for long-term research and evaluation strategies. The complex interrelationship among models of education, desired outcomes, methods of achieving those outcomes, and methods of studying the results is approached from

socio-historical, theoretical, and empirical viewpoints. An historical overview of education in Ontario documents the interrelationship between societal change and educational reform as well as the cyclic nature of educational philosophies. Student outcomes are defined through a typology and a discussion of current educational policy goals in light of that typology. Three major sociological models of education - structural functionalism, conflict theory, and the interpretive paradigm - are reviewed with respect to the kinds of outcomes and determinants stressed and characteristic research methodologies. The substantive areas of transition to work, academic achievement, and multiculturalism are examined to further the investigation of the utility of larger models for studying specific outcomes. The definition and measurement of models and outcomes by Canadian researchers and education professionals in the past is examined through an inventory of Canadian data sets identified in the literature, through ONTERIS, all major Canadian data archives, and Ontario school boards. Current definitions and measures of school outcomes are provided in the results of a survey of education practitioners. These data include perception of desirable outcomes and the OSIS goals of education and speak to the needs of future research.

Anisef, P. and Johnson, L.C. (1993) *The young adult learner: fifteen- to eighteen-year-old students in the Ontario English-language school system, Volume 2*. Ontario Ministry of Education and Training.

**Utility:** Student profiles

**Abstract:** Dramatic social, demographic, economic, technological, and other changes have placed increasing pressure on our educational systems over recent years. This report, commissioned by the Ontario Ministry of Education, assesses the context of these changes in light of educational and related profile data on 15 to 18 year old learners. In developing a perspective on the problems and opportunities which face us today, the findings of this report suggest the need for a more responsive and flexible approach to classroom instruction, to the school as a community institution with open boundaries, and to the diversity of learning needs, backgrounds, and expectations in our changing population.

This reports is intended as a resource for both the Ontario Ministry of Education and the various boards of education within the province, to assist in the design of policies and programmes which respond to the unique social and psychological needs of secondary school students. The findings are interpreted within the context of learning styles theory and student profiles generated by statistical databases and literature reviews. The perspective is interdisciplinary.

This study constructs profiles of the 15 to 18 year old learner within the Ontario English educational system, grades 10 to graduation, by examining the available literature as well as a variety of quantitative databases, and qualitative interviews. Of particular concern are gender, ethno-cultural origin and socio-economic status variables and their relationship to young adult learners, particularly visible minorities, special needs groups, students at risk of dropping out and students who have dropped out and returned to school.

Anisef, P. and Okihiro, N. (1982) *Losers and winners: The pursuit of equality and social justice in higher education*. Butterworth & Co. 0-409-81111-4.

**Utility:** Participation in higher education

**Abstract:** Is post-secondary education equally available to women, the poor and ethnic minorities? This book provides a comprehensive analysis of enrolment trends at Canadian universities, colleges and private trade schools. A thorough examination of relevant social science literature offers valuable insight into the key concepts of accessibility to higher education and equality of educational opportunity. After reviewing twenty-five years of legislative debates, government commissions and reports, the authors challenge the political response to these concepts, offering recommendations for improving equality of access to higher education.

Association of Universities and Colleges of Canada (2000) *Trends: The Canadian University in Profile*.

**Utility:** Reference used for the report

**Abstract:** It provides data and analysis on current trends affecting universities in Canada and abroad. The statistical handbook looks at recent trends in university funding, faculty, enrolment, degrees and research.

Bouchard, B. and Zhao, J. (2000) *University education: Recent trends in participation, accessibility and returns*. *Education Quarterly Review* 6 (4):24-32.

**Utility:** Reference used for the report

**Abstract:** Public debate about increased tuition fees and corresponding concern over student indebtedness raises questions about the growing costs of university education. Factors influencing the choice to attend university include availability of financing, family socio-economic status, labour market conditions and perceived benefits of such an education.

This article provides an overview of important trends in costs and accessibility and assesses the financial and related returns (such as employment prospects) associated with participation in university education. The focus is on the trend in participation rates in the 1990s, compared with the national and provincial trends in tuition fees over the same period. We include an analysis of the cost of tuition versus the ability to pay, as illustrated by the evolution of average family income. Then we examine how a university education relates to job prospects and earnings. The conclusion summarizes the various trends that, together, illustrated the magnitude of the investment associated with participation in university education.

Bowlby, J.W. and McMullen, K. (2002) *At a Crossroads: First Results for the 18 to 20-Year-old Cohort of the Youth in Transition Survey*. Human Resources Development Canada; Statistics Canada.

**Utility:** Reference used for the report

**Abstract:** Human capital – having a labour force that possesses the knowledge and skills needed for innovation and productivity growth and that is flexible and adaptable in the face of on-going change – is the cornerstone of success for societies living and working in today's knowledge-based, globalized environment. Canada's long-term economic and social potential therefore depends in good measure on how successfully youth navigate school and work transitions. The Youth in Transition Survey (YITS), developed through a

partnership between Human Resources Development Canada and Statistics Canada, is a longitudinal survey that was designed to collect a broad range of information on the education and labour market experiences of youth. The first cycle of the YITS for the 18-20-year-old cohort collected data from more than 22,000 youth between January and March 2000.

Youth aged 18-20 are at a crossroads. For many, the transition from school to work is a complex, non-linear process. Given variable pathways, a survey such as the YITS that tracks the progress of youth is a key instrument for identifying the factors that can assist youth in the successful pursuit of their education and employment goals. The second cycle of the YITS, scheduled for early 2002, will collect new information from this same group of youth, tracking their educational and labour market activities over time.

At a Crossroads provides a descriptive overview of the first results from the 2000 Youth in Transition Survey for 18-20-year-olds in Canada.

Butlin, G. (1999) Determinants of postsecondary participation. *Education Quarterly Review* 5 (3):9-35.

**Utility:** Reference used for the report

**Abstract:** (Excerpt from introduction) In today's changing economy, government, policy organizations, and members of the business community all emphasize the importance of knowledge, skills and lifelong learning for individuals to succeed in the labour market and for the economy to grow. Postsecondary education has been targeted as one of the key vehicles for producing a labour force ready to meet the challenge of the new workplace. Human Resources Development Canada estimates that nearly half of new jobs created in the next decade will require a minimum of 17 years of education. In an economy requiring high levels of education, equity of access to postsecondary education becomes a particularly important policy issue.

Studies of equity of access to education in Canada typically focus on the background characteristics of persons who participated in postsecondary education compared to those who have not participated. Most studies over the past 25 years have examined differences in participation by socioeconomic status of the student's family, gender and language (anglophone versus francophone). (...) Most studies which have examined equity of access to postsecondary education in Canada use information gathered from cross-sectional surveys of the general population. (...)

I am unaware of any study that targets a representative sample of young persons in the process of making the transition from high school to postsecondary education or labour force, in order to examine the multiple factors, in addition to parent's socioeconomic background, gender and language that may affect participation in postsecondary education. The 1995 School Leavers Follow-up Survey (SLF) provides a unique opportunity to examine how the educational attainment of parents, gender, language, family type, nativity, along with factors such as school achievement, high school leaving, employment during high school, peer influences, and school involvement simultaneously affect the odds of participating in postsecondary education. The School Leavers Survey (SLS) targeted the population of Canadian youth aged 18 to 20 in 1991, gathering information about various aspects of high school leaving. The SLF gathered information on a sample of the same young persons from the SLS in 1995, focusing on activities after high school.

Canadian Undergraduate Survey Consortium (2001) Survey of first-year university students: The University of British Columbia, Report of findings.

**Utility:** Reference used for the report

**Abstract:** This is the seventh co-operative study undertaken by the Canadian Undergraduate Survey Consortium. The annual surveys target various undergraduate groups; three of the surveys have focused on a sample of all undergraduates, while others have targeted specific types of students. The focus of this year's research is first-year students.

Christofides, L.N., Cirello, J. and Hoy, M. (2001) Family income and postsecondary education in Canada. *Canadian Journal of Higher Education* 31 (1):177-208.

**Utility:** Factors related to participation / Specific population

**Abstract:** We use data from the Surveys of Consumer Finance (1975-1993) to examine how postsecondary education participation rates have evolved over time and how certain variables may affect them. A number of socio-economic influences are shown to affect participation rates. Beyond these, particularly pronounced trend increases in postsecondary education attendance for children from low-income households have led to a convergence in the participation rates of children from different income groups and a consequent reduction in the regressivity associated with subsidies for postsecondary education. We consider possible reasons for this convergence. Conditioning on a number of other variables, we are particularly interested in the possibility that increases in family real income may have affected the demand for postsecondary education by children from low-income families more than the demand from high-income households. We find that, although income does have a statistically significant non-linear influence which can explain much of the cross-sectional difference in attendance at postsecondary institutions, its quantitative effects are not sufficiently strong to account for the convergence over time in participation by children from different family income groups.

Cloutier, R. (1990) Les "nouvelles" clientèles universitaires québécoises: Différences et ressemblances avec le modèle de "l'étudiant traditionnel". *Les cahiers du LABRAPS* 7 0824-0736.

**Utility:** Student profiles

**Abstract:** Ce cahier porte sur l'évolution, depuis 15 ans, des clientèles universitaires québécoises et de leurs modes de fréquentation des programmes d'études. L'auteure soumet l'analyse des données statistiques portant sur les effectifs étudiants à une série de questions.

Les institutions universitaires québécoises seraient-elles devenues principalement des agences massives de certification (distributrices de titres scolaires)? Ont-elles perdu leur rôle de socialisation des élites? Les "nouvelles" clientèles universitaires seraient-elles en train de faire disparaître l'étudiant traditionnel et ses privilèges de classe, de genre et d'origine ethnique?

Les résultats de cette étude montrent l'existence d'une population étudiante beaucoup plus hétérogène que dans les années soixante. Ces "nouvelles" populations coexistent avec "l'étudiant traditionnel". Des forces internes et externes au système d'enseignement supérieur militent en faveur du maintien de tous ces groupes.

Corbin Dwyer, S. (2000) Overcoming obstacles to education: The experience of women university students diagnosed with attention-deficit/hyperactivity disorder. *Canadian Journal of Higher Education* **30** (1):123-148.

**Utility:** Student success / Specific population

**Abstract:** Much of the research on Attention-Deficit/Hyperactivity Disorder (AD/HD) has been conducted with male children, resulting in limited knowledge of the disorder in females and adults. Even though increasing numbers of students with the disorder are entering postsecondary institutions, AD/HD in this population is an understudied area. A hermeneutic phenomenological methodology was chosen to explore the experience of eight women university students diagnosed with AD/HD. Two themes describing obstacles to their education, Robbed of Time and Thoughts Like a Rubber Ball, were identified. Strategies and treatment issues, implications for educators and mental health professionals, and directions for future research are considered.

Diambomba, M., Perron, M. and Trottier, C. (1991) Les cheminements scolaires et l'insertion professionnelle des étudiantes et étudiants de l'université: Éléments d'un bilan d'études au Québec. *Les cahiers du LABRAPS* **10** 0824-0736.

**Utility:** Participation characteristics

\* **Abstract:** L'objectif de cet ouvrage est de rendre compte des travaux d'un atelier de recherche sur les cheminements scolaires et l'insertion professionnelle des étudiantes et étudiants du 1er cycle des universités du Québec. Plusieurs études ont été réalisées sur ce thème à partir des banques de données du ministère de l'Enseignement supérieur et de la Science, des universités, d'organismes para-gouvernementaux et de Statistique Canada, par des chercheuses et des chercheurs appartenant à ces divers milieux. Il nous a paru pertinent de réunir dans cet ouvrage les éléments du bilan qui en a été fait dans le cadre de l'atelier de recherche.

Duquette, C. (2000) Experiences at University: Perceptions of students with disabilities. *Canadian Journal of Higher Education* **30** (2):123-142.

**Utility:** University experience / Specific population

**Abstract:** Using Tinto's (1975) model of dropping out or persisting, this study examined the perceived experiences at university of students with disabilities. Tinto's (1975) model presents three variables which are related to persistence: background characteristics, integration into the academic milieu, and social integration. Thirty-six students completed a questionnaire, and of this group 17 participated in a narrative interview. Later, six of these people engaged in a focus group. The findings of this study showed that background characteristics and academic integration were more important variables related to persistence than social integration. Goal commitment, support of family and friends and understanding professors were found to be important elements related to persisting among these students with disabilities.

Dussault, F.-P. and Manseau, A. (1997) Pitfalls in the assessment of postgraduate scholarship programs: the need for new indicators. *Canadian Journal of Higher Education* 27 (2-3):91-112.

**Utility:** Assessment methodology / Indicators

**Abstract:** Very few published studies have examined the outcomes of postgraduate scholarship programmes. Basing their analysis on these studies and on internal reports from US and Canadian organisations involved in scholarship programmes, the authors have compiled an overview of the wide variety of indicators and methods that have been used and conducted a comparative study of outcomes using the four most commonly used indicators: awarded diploma, obtained job, obtained related job and pursuing studies. Their analysis revealed several methodological pitfalls in comparing the results. Although the use of available data limits the depth of a comparative analysis, the results show that scholarship programmes tend to increase the rate of awarded diplomas.

Gilbert, S., Barr, L., Clark, W., Blue, M. and Sunter, D. (1993) Leaving school: Results from a national survey comparing school leavers and high school graduates 18 to 20 years of age. Human Resources and Labour Canada.

**Utility:** Factors related to retention / Student success

**Abstract:** The number of high school dropouts and the factors influencing premature school departure are strategic indicators of school system functioning. In light of traditionally high estimates of non-completion (30%), Employment and Immigration Canada commissioned Statistics Canada to conduct a School Leavers Survey (SLS) to estimate the magnitude of the problem and to identify the circumstances associated with dropping out.

Using the Family Allowance files as the sampling frame, a stratified random sample of 18,000 18-20-year-olds was selected. A computer assisted telephone interview (CATI) administered from April-June, 1991 obtained demographic/background, school experience, and post-school labour market and other outcome measures, along with whether respondents were in school (continuers), had graduated (graduates) or had left before graduating (leavers). A total of 10,782 individuals were traced (60% contact rate), and 9,460 were interviewed (88% response rate). The respondents represent 184,000 leavers, 241,000 continuers and 711,000 graduates.

The term "dropout" has been used to describe all high school non-completers regardless of the reasons or conditions which mark their leaving. It also carries a pejorative or stigmatizing connotation associated with individual failure. Non-completers are, however, a relatively heterogeneous group. They do not fit the stereotypical picture of a dropout, particularly concerning academic achievement. Consequently, the more neutral designation "school leaver" is used to describe the survey findings. The focus of the report is on comparing school leavers with high school graduates.

Gilbert, S., Chapman, J., Kietsche, P., Grayson, P. and Gardner, J. (1997) From best intentions to best practices: The first-year experience in Canadian postsecondary education. University of South Carolina: Monograph Series Number 22, National Resource Center for the Freshman Year Experience and Students in Transition.

**Utility:** Practices

**Abstract:** How students experience the first year of the study at colleges and universities is important for their continuation, grades, degree completion, satisfaction and a number of other positive student outcomes. There is a rich and increasingly systematic body of

information and research on the Freshman Year Experience (FYE) in the United States. What is needed is a profiles and an analysis of the growing FYE (meaning The *First-Year Experience*) in Canada.

The purpose of this monograph is to review the results of the first comprehensive survey of the first year in Canadian postsecondary education, to include both colleges and universities, and to examine the range and consequences of courses and programs designed to improve the first year of study. The study proceeds from both an individual and institutional point of view. First, we are interested in how students perceive, experience and adjust to that important and formative first year.

Second, we are interested in documenting exactly which programs/services are offered by postsecondary institutions, how they are offered (delivery characteristics) and evaluated or assessed. This information is extremely useful to institutions for planning and in dealing with quality and accountability issues. The study will also identify which practices work or do not work and the circumstances under which positive results are achieved. Our aim is to be as inclusive as possible, to highlight success and best practices, and generally, to provide information to internal and external stakeholders on what works and what doesn't so that improvements can be made to the quality of our programs and services. This monograph should be of interest to students, faculty, student services professionals, staff, and institutional managers in Canada and the United States.

Gomme, I.M. and Gilbert, S.N. (1984) Paying the Cost: Some Observations on the Problem of Postsecondary Student Attrition. *Canadian Journal of Higher Education* 14 (3):95-100.

**Utility:** Factors related to retention

**Abstract:** Student attrition has been an area of primary concern to university administrators for some time. Research indicates that attrition rates in the U.S. and Canada are quite high. Assessments show that rates for American universities have persisted at the 50% level during the first half of the 20th century and that these rates are holding constant at present. A recent review of Canadian research on voluntary withdrawal suggests that the problem is no less severe in our universities.

Attrition is not an insignificant problem given its magnitude and the costs incurred by students, by universities, and by society. Students who withdraw may suffer losses in three forms: 1) funds paid out for fees and residence, 2) employment earnings forgone as a consequence of inadequate certification, and 3) the potential acquisition of the negative self concept traditionally associated with failure to achieve. Financial losses are experienced by universities through the high initial admission costs and through the expenditures related to the planning and operation of programs for students who cease to attend. Finally, high dropout rates undermine the public's faith that universities can adequately meet the intellectual and vocational needs of their clientele.

To remedy these problems, researchers have advocated the creation, refinement, and initiation of intervention programs designed to promote the retention of those who might, left to their own devices, drop out. Given existing constraints, it is important to carefully consider the extent to which strategies to reduce attrition can be effectively implemented. In reflecting upon this issue, recent research on student attrition is reviewed and factors relevant to the development and implementation of policies to improve retention are discussed.

Grayson, J.P. (1995) Does race matter? Outcomes of the first year experience in a Canadian university. *Canadian Journal of Higher Education* **25** (2):78-109.

**Utility:** Societal variables associated to withdrawal

**Abstract:** Canadian cities are experiencing increasing ethnic and racial diversity. As a result there is a growing concern with the degree to which Canadian institutions meet the needs of a heterogeneous population. Despite this concern, as yet, there have been no systematic studies of race relations on Canadian campuses and the degree to which outcomes of the university experience are affected by race.

Data for the current study were collected at York University through a survey of 1,093 students at the time of entry in September and a survey of 1,129 students conducted in February/March of the first year. Data analysis focuses on the background characteristics of students of various races, their social and academic involvement and classroom experiences, outcomes of the first year in university, and the degree to which race affects both experiences and outcomes.

It is found that in general students of non-European origins come from families with different socio-economic characteristics than those of European descent. In addition, the nature of the university experience varies by minority status and/or race. Comparisons, however, do not always favour students of European origin. Finally, although some outcomes of the first year experience – self-assessed intellectual development and knowledge, grade point averages, and intentions to return to the university – vary by racial group; race per se explains little, if any, of the total variance. In essence, there is a considerable degree of equality in outcomes so far as race is concerned. Explanations for differences in outcomes are to be found in classroom experiences, contacts with faculty etc., and academic involvement.

Grayson, J.P. (1997) Academic achievement of first-generation students in a Canadian university. *Research in Higher Education* **38** (6):659-676.

**Utility:** Academic achievement / Specific population

**Abstract:** Previous research has shown that first-generation students confront greater problems than traditional students. In order to determine if this disadvantage extends to first-year grade point averages (GPAs) in a commuter university in which the majority are first-generation students, 1,849 students at York University in Toronto were surveyed at the end of the first year and survey results were merged with information on grades from administrative records. The results of stepwise regression and classification and regression tree analyses show that traditional students enjoy a slight advantage in terms of GPA and that while traditional students have higher levels of involvement in various university activities contributes to GPA.

Grayson, J.P. (2001) The performance of "gifted" high school students in university. *Canadian Journal of Higher Education* **31** (1):121-139.

**Utility:** Factors related to participation / Specific population

**Abstract:** In Ontario, school boards are required to provide opportunities so that "gifted" students (i.e., those with exceptional abilities) can obtain learning experiences that are beyond those offered in regular classes. This study follows graduates of regular and gifted programs over four years of studies at York University in Toronto. Overall, it is found that having participated in a gifted program in high school does not result in increased levels of achievement in university; however, graduates of gifted high school programs have slightly higher self-assessed thinking and reasoning and problem-solving

skills and are marginally faster in credit completion than other students. These findings aside, it is difficult to argue that participation in a high school gifted program confers an advantage students once they get to university.

Guppy, N. (1984) Access to Higher Education in Canada. *Canadian Journal of Higher Education* **14** (3):79-94.

**Utility:** Factors related to participation

**Abstract:** This paper examines changes in access to higher education in Canada for individuals born in the first half of this century. The data show variations in attendance at, or graduation from, university or non-university postsecondary educational programmes by gender, language group, and socioeconomic background. The statistical analysis uses information from a large, nationally representative sample of Canadians. Results show a process of democratization at the postsecondary non-university level, but only a modest reduction in disparities at the university level.

Hill, J.L. (1992) Accessibility: students with disabilities in universities in Canada . *Canadian Journal of Higher Education* **22** (1):48-83.

**Utility:** Factors related to participation / Specific population

**Abstract:** Data indicate that the number of students with disabilities entering higher education is increasing. The efforts made by 27 Canadian universities in this respect are considered. Physical accessibility for students with a wide range of handicapping conditions was also explored.

Johnson, G.M. (1994) Undergraduate student attrition: a comparison of the characteristics of students who withdraw and students who persist. *Alberta Journal of Educational Research* **40** (3):337-353.

**Utility:** Societal variables associated to withdrawal

**Abstract:** A recent Commission of Inquiry on Canadian university education reported that from the crude data available "it would appear that 42 percent of full-time students who entered a university in 1985 failed to get a degree from that university within five years". One hundred and sixty-three undergraduate students who were required to withdraw by their university, 109 undergraduates who had withdrawn by completing the necessary withdrawal forms, 226 undergraduates who withdrew from university by simply not returning as anticipated by the Registrar and 153 students continuing undergraduate programmes were interviewed regarding demographic, academic, financial, personal and learning characteristics and experiences. A comparison of the characteristics of these groups is provided in this article.

Johnson, G.M. and Buck, G.H. (1995) Students' personal and academic attributions of university withdrawal. *Canadian Journal of Higher Education* **25** (2):53-77.

**Utility:** Societal variables associated to withdrawal

**Abstract:** A Commission of Inquiry on Canadian University Education recently reported that approximately 42 percent of full-time undergraduate students who entered Canadian universities in 1985 failed to obtain a degree within five years. While this statistic is startling, perhaps, of greater concern is the apparent lack of interest shown by most Canadian universities in the subject of undergraduate student attrition. As an initial step toward addressing the issue of Canadian university attrition, a conceptual model of undergraduate student withdrawal is proposed. The model is based on the assumption

that students are characterised by a wide range of personal and academic variables. Such characteristics interact or co-exist with institutional variables such as campus integration. This interaction results in the quality of student academic performance and the nature of student psychological condition. Poor quality of student academic performance results in institution-initiated undergraduate withdrawal; a variety of psychological variables (e.g. satisfaction, stress) result in student-initiated undergraduate withdrawal. The bases of this model were findings obtained from questioning 498 undergraduate students who had withdrawn from a large western Canadian university. Personal student characteristics, institutional factors and societal variables frequently emerged as students' attributions of university withdrawal.

Junor, S. and Usher, A. (2002) *The Price of Knowledge: Access and Student Finance in Canada*. First Edition, Canada Millennium Scholarship Foundation. 973049502.

**Utility:** Reference used for the report

**Abstract:** This comprehensive fact book is designed to serve the needs of college and university administrators, student leaders, social policy experts, government decision makers, and career counsellors. It combines existing and original research to examine the key issues surrounding student access to post-secondary studies and financial aid. The first publication of its kind in Canada, the fact book draws on a new, year-long national survey of student assets, income, and expenditures undertaken in conjunction with Ekos Research. It also includes new special-run data on government and institutional expenditure on student assistance.

The Price of Knowledge sheds light on timely subjects such as:

- The full costs faced by students registered in professional programs;
- Student income and expenditure;
- University entrance requirements;
- The range of student aid available in Canada, by type and level of aid; and
- Tax benefits available to post-secondary students.

The Price of Knowledge pulls together a wide array of new and existing qualitative and quantitative data into one publication. It provides answers to key questions about post-secondary studies, including the following:

When do students decide to pursue post-secondary education? What factors influence their decision?

What are their expectations in terms of higher education and labour market outcomes?

How do students and their families prepare for post-secondary education?

Where and what are students studying in Canada? What is the socio-economic, ethnic, and demographic structure of Canada's student body?

How much does it cost to pursue post-secondary studies? What costs, other than tuition, are associated with post-secondary education?

What are the various sources of student income, including parental aid, employment, credit, and financial aid? What are the demographics of student borrowers?

What are the various forms of student financial aid across Canada? Who is eligible? Under what terms and conditions?

What other forms of student assistance are available, including private lines of credit, student employment programs, tax assistance, and institutional aid?

How much do governments spend on post-secondary education and student assistance?

What is the labour market outlook for students who complete their post-secondary studies? What are their earnings? What debt loads do they carry and for how long?

What is the public's investment in post-secondary education?

Knighton, T. (2002) Postsecondary participation: the effects of parents' education and household income. *Education Quarterly Review* 8 (3):25-32.

**Utility:** Reference used for the report

**Abstract:** The economic, societal and individual benefits of postsecondary education are well established. A large pool of research has shown that many factors influence the pursuit of postsecondary education. These include individual background characteristics, academic achievement and school-related factors as well as cultural and social determinants. In particular, household income and parents' educational attainment have remained strong, persistent factors relating to postsecondary access. Canadian studies completed to date have examined these two factors independently but not together. The purpose of this paper is to examine both the independent and combined effects of household income and parents' education on postsecondary participation.

Looker, D.E. (1997) In search of credentials: factors affecting young adults' participation in postsecondary education. *Canadian Journal of Higher Education* 27 (2-3):1-36.

**Utility:** Factors related to participation

**Abstract:** This paper uses longitudinal data from a survey of youth in three areas (Hamilton, Halifax and rural Nova Scotia) to examine the factors that affect young adults' participation in postsecondary education, applying Bourdieu's notions of capital and habitus. Data were collected from 1,200 youth in 1989, with questionnaire follow-ups in 1992 and 1994. The analyses examine: (1) the factors that youth themselves say affect their educational decisions; and (2) cross-tabulation and regression results that document the variables empirically related to the youth's educational expectations when they are 17 and their attainments by age 24. Cost factors were found to be a major deterrent as were, for some youth, their knowledge of and attitudes to schooling. Parental education and income affect their children's decisions. University is seen to be "the" preferred postsecondary path; other institutions such as community colleges seem to be the "fall back" option for those who cannot or do not get to university. Results are relevant to an understanding of the persistent impact of parental capital and of one's attitudes on educational outcomes. There are also policy implications regarding the resources needed by different students to better access the postsecondary options to them.

Pageau, D. (2000) Desire and Commitment - The Keys to Success! Canadian Institutional Research and Planning Association Conference, Saskatoon, October 15-17.

**Utility:** Student profiles / Student success / Participation characteristics / Indicators

**Abstract:** This paper presents the results of a study carried out by Université du Québec's Direction du recensement étudiant et de la recherche institutionnelle (DRERI) - Student population and institutional research. Using data from ICOPE surveys (I for indicators, CO for conditions, and PE for 'poursuite des études' - perseverance at one's studies), this study focused on the links between academic success and student characteristics.

The ICOPE surveys had three objectives: 1) Draw up a profile of the student population and follow its evolution; 2) Understand more clearly the dynamic of the process leading to graduation; and 3) Identify new avenues of action to support students up to graduation. The main question we wish to outline an answer in this study is - Are there any characteristics presented by students beginning their program that foster their chances of continuing until they graduate? To answer this question, the information gathered through the ICOPE questionnaire was correlated with the academic data from the administrative files on the student cohorts.

Pageau, D. and Bujold, J. (2000) Dis-moi ce que tu veux et je te dirai jusqu'où tu iras: Les caractéristiques des étudiantes et des étudiants à la rescousse de la compréhension de la persévérance aux études, 1er volet - Les programmes de baccalauréat. Direction du recensement étudiant et de la recherche institutionnelle, Université du Québec.

**Utility:** Student profiles / Student success / Participation characteristics / Indicators

- \* **Abstract:** Le présent document, premier d'une série de trois, porte sur les programmes de baccalauréat et se veut une première étape dans l'analyse des caractéristiques des étudiants et de leur relation avec le cheminement scolaire. L'information y est traitée par dimension (caractéristiques académiques, caractéristiques sociodémographique, conditions de vie, état de la préparation, intentions, motivations et intérêt pour le programme d'études, liens avec le marché du travail, connaissances à propos du programme d'études) et, à l'intérieur de chacune d'elles, le profil des étudiants précède une analyse du lien entre les diverses caractéristiques et le cheminement.

La question à laquelle ce document se veut un élément de réponse est la suivante: est-ce que certaines caractéristiques que présentent les étudiants à leur arrivée dans un programme de baccalauréat favorisent ou défavorisent la poursuite des études jusqu'au diplôme? La réponse à cette question pourrait alors permettre d'identifier des pistes d'actions pouvant encourager la réussite éducative de tous ceux qui le désirent.

Pyke, S.W. and Sheridan, P.M. (1993) Logistic regression analysis of graduate student retention. *Canadian Journal of Higher Education* **23** (2):44-64.

**Utility:** Curriculum factors associated to retention

**Abstract:** Logistic regression analysis was utilised to predict the retention of 477 master's and 124 doctoral candidates at a large Canadian university. Selected demographic (e.g. sex, marital status, age, citizenship), academic (e.g. GPA, discipline, type of study, time to degree completion) and financial support variables (e.g. funding received from internal and external scholarships and from research, graduate and teaching assistantships) were used as independent variables. The dichotomous dependent variable was whether the student successfully completed the degree. Results for master's students indicate that higher graduate GPAs, increased length of time in the programme, increased funding from all sources, full- or part-time registration status in the coursework only programme and full-time registration status in the coursework plus major research paper programme significantly improve the student's chances of graduating with the degree. For doctoral candidates, only increased length of time in the programme and increased funding from all sources significantly increase the chances of graduating with the doctorate.

Statistics Canada and Council of Ministers of Education (Canada) Education Indicators in Canada, Report of the Pan-Canadian Education Indicators Program 1999. Canadian Education Statistics Council.

**Utility:** Reference used for the report

**Abstract:** Education, at all levels, from pre-primary to postsecondary through to adult education and training, plays a crucial role in the development of individuals and society. An educated work force, capable of using knowledge to generate innovation, is vital to a strong and prosperous economy. Education empowers people to be involved in the issues and debates affecting them and society. Indeed, in the Joint Ministerial Declaration of 1999, provincial and territorial ministers responsible for education and training affirmed that the future of our society depends on informed and educated

citizens. The Organisation for Economic Co-operation and Development (OECD) has adopted the principle of lifelong learning to reflect the diversity of education and training that individuals will engage in over their lifetimes.

The Pan-Canadian Education Indicators Program: In the Victoria Declaration of 1993, the provincial and territorial ministers responsible for education and training agreed to create the Pan-Canadian Education Indicators Program (PCEIP) in order to develop a set of statistical measures that would provide information on education systems in Canada. Policy makers, practitioners and the general public can use these indicators to evaluate the performance of education systems and to inform decisions about education priorities and directions.

Tait, H. (1999) Educational achievement of young Aboriginal adults. *Canadian Social Trends* Spring 6-10.

**Utility:** Reference used for the report

**Abstract:** The Aboriginal population in Canada is young and growing quickly, and over the next few decades, a large number of young adults will be making the transition from school to work. Given that the labour market demands higher levels of schooling than ever before, obtaining a solid education is becoming increasingly important. A well-educated Aboriginal workforce is essential to meet the requirements of the labour market, and hence reduce high levels of youth unemployment and dependence on social assistance. (...) This article explores the educational attainment of young Aboriginal adults aged 20 to 29 in the 1980s and the 1990s (using Census data), and compared their levels of schooling with those of other young Canadians.

Tardif, C. and McMahon, F. (1989) Francophones and post-secondary studies. *Canadian Journal of Higher Education* 19 (3):19-23.

**Utility:** Participation / Specific population

**Abstract:** Francophones intending to pursue post-secondary studies in French face two major problems: access to French-language post-secondary institutions and the phenomenon of francophone assimilation. This article examines the current status of post-secondary education provided to the francophone minority outside Quebec, with the authors presenting case-study material from Alberta.

Thiessen, V. and Looker, E.D. (1999) Investir dans la jeunesse: Le projet sur la transition de l'école au travail en Nouvelle-Écosse. Ministère des Travaux publics et Services gouvernementaux Canada.

**Utility:** Good practice

**Abstract:** (Excerpt from introduction) Les contextes démographique, économique et éducatif dans lesquels s'inscrit le Programme de transition de l'école au travail de la Nouvelle-Écosse (le Programme) a sans doute joué beaucoup dans l'attrait et l'efficacité de celui-ci. Le chapitre 1 de ce livre situe chacun des sites sur le canevas plus grand que sont le Canada et la Nouvelle-Écosse. Il décrit également les conditions qui ont régi le Programme et propose les paramètres qui permettraient d'appliquer ailleurs les leçons apprises.

Il est bien connu que le tissu économique de la société canadienne a négocié un virage serré de l'agriculture et de la fabrication aux services communautaires, commerciaux et personnels. Le pourcentage de l'emploi a presque doublé au cours des dernières années dans ces derniers, passant de 20% en 1961 à 38% en 1997. L'une des caractéristiques importantes du secteur des services est le fait qu'il englobe des emplois aux deux pôles

des compétences. Il y a des emplois prometteurs dans le secteur des services financiers et dans celui des services aux entreprises, tout comme il y a des emplois faiblement rémunérés et peu spécialisés dans le commerce de détail et les services aux consommateurs. Les projections sur les professions renforcent la conclusion voulant que le marché du travail soit en voie de bifurquer, la croissance la plus vigoureuse étant prévue du côté des emplois exigeant plus de 16 années de scolarité (55%) et ceux exigeant moins d'une douzième année (40%).

Outre le fait qu'une bonne partie de ses emplois soient concentrés dans le secteur des services, l'économie canadienne se caractérise de plus en plus par des formules de travail non standard telles que le travail à temps partiel, les emplois à court terme et le travail autonome. (...)

Tousignant, J. (1989) Les personnes handicapées inscrites dans les universités québécoises : Situation et perspectives. Ministère de l'Enseignement supérieur et de la Science.

**Utility:** Reference used for the report

\* **Abstract:** (Excerpt from introduction) La Société québécoise s'est engagée, depuis plusieurs années déjà, dans un processus à la fois généreux et exigeant d'intégration des personnes handicapées à la vie sociale, culturelle et économique de l'ensemble des citoyens. C'est là un mouvement qui s'est accéléré depuis une quinzaine d'années, sous la pression des personnes handicapées elles-mêmes, à partir aussi d'un éveil collectif de la conscience aux droits fondamentaux de chacun dans la société et au caractère scandaleux de la privation de certains de ces droits pour des groupes particuliers de citoyens.

Des moments particulièrement significatifs de cette évolution demeurent certainement l'adoption de la *Loi assurant l'exercice des droits des personnes handicapées*, en juin 1978, après deux années de débats et de clarifications multiples et pertinentes apportées aux objectifs et aux moyens proposés dans ce projet de Loi. Toujours en 1978, dans le sillage de la nouvelle Loi, était officiellement créé un Office des personnes handicapées du Québec, avec le mandat de promouvoir et de défendre les droits et intérêts des personnes handicapées et d'assurer leur intégration sociale, scolaire et professionnelle par des moyens appropriés.

L'année 1981 fut un autre de ces temps forts. Au Québec, cette année que l'ONU avait déclarée Année internationale des personnes handicapées, fut marquée, entre autres événements, par de nombreuses « tables régionales » et quelques colloques provinciaux aux retombées considérables. Parmi ceux-ci, le Colloque de mars 1981 sur les droits des personnes handicapées, dont la grande majorité des 450 participants furent des handicapés qui surent dire publiquement et pour la première fois les obstacles à l'exercice de leurs droits. Et, en décembre 1981, l'importante Conférence socio-économique sur l'intégration de la personne handicapée, qui est demeurée comme un symbole de « l'émergence des problèmes des personnes handicapées sur la scène publique ».

Ce Colloque fût aussi l'occasion de l'éveil de nombreux décideurs québécois à la responsabilité solidaire de leurs organismes respectifs en matière d'intégration sociale et économique des personnes handicapées. C'est de cette année 1981 que date le début de l'élaboration d'une politique d'ensemble, finalisée en 1984 et à laquelle contribuèrent tant d'organismes publics et privés ainsi que les personnes handicapées elles-mêmes.

Il reste encore aujourd'hui bien des situations à corriger et également d'importantes transformations mentales à réaliser. De plus, des retours en arrière demeurent toujours

possibles, surtout lorsque changent les situations économiques ou les idéologies qui entraînent les sociétés et les décideurs.

Le ministère de l'Enseignement supérieur et de la Science se considère à juste titre comme un partenaire majeur de ce projet collectif à long terme d'intégration sociale des personnes handicapées. Il agit dans son domaine propre, conjointement avec ses partenaires que sont les collèges et universités. Un programme d'intervention en faveur des handicapés existe déjà et il fonctionne. Le Ministère soutient aussi des projets expérimentaux et répond à des demandes particulières, pour des projets de recherche, par exemple. Ce qui manque toujours, mais qui s'impose de plus en plus à mesure que se développent les services, tant ceux du ministère que ceux des collèges et universités, c'est une politique d'ensemble d'intervention dans les établissements d'enseignement supérieur. Déjà des propositions pouvant mener à une telle politique ont déjà été élaborées et soumises pour le secteur collégial. Le Ministère désire faire de même pour les établissements universitaires. C'est dans cette perspective qu'il a souhaité connaître, dans un premier temps, l'état de la situation des personnes handicapées dans les établissements universitaires québécois, pour en arriver ensuite plus facilement à formuler quelques principes d'intervention efficace et cohérente.

Tousignant, J. (1995) La vie étudiante des personnes handicapées dans les établissements d'enseignement universitaire québécois : Un bilan des années 1989 à 1995. Ministère de l'Enseignement supérieur et de la Science.

**Utility:** Reference used for the report

\* **Abstract:** L'objet du présent rapport est de dresser un bilan de ce qui s'est fait dans le milieu universitaire à l'égard des personnes handicapées, au cours des cinq dernières années.

Non seulement on observe qu'il y a eu un développement impressionnant des services particuliers offerts aux étudiants handicapés, on constate aussi que l'implication de chaque personne s'enracine dans de véritables prises de conscience collectives. Ce ne sont plus des plus des individus qui se font les champions des droits des personnes handicapées, mais plutôt le personnel de direction, les administrateurs, les professeurs et les étudiants eux-mêmes qui endossent les mesures qui sont prises en faveur des étudiants qui ont des déficiences.

De sorte que la Politique cadre sur l'intégration des personnes handicapées, qui a été adoptée en 1994 par la Conférence des recteurs et principaux des universités du Québec (CREPUQ), ne doit pas être vue comme le résultat d'un engagement auquel la Conférence aurait consenti avec plus ou moins de conviction, au moment du forum de 1993, mais vraiment comme une prise de position des universités québécoises. Cette politique n'aurait pu voir le jour si elle n'avait pu se fonder sur des convictions partagées et sur des pratiques déjà établies dans les universités.

Au cours des dernières années, les universités ont donc continué à procéder à différents ajustements relatifs à l'enseignement et à des modifications physiques et organisationnelles, de façon à permettre aux personnes handicapées de participer pleinement aux mêmes activités que les autres étudiants. Elles ont agi dans la perspective de renforcer l'autonomie des étudiants handicapés, de réduire les écarts entre ces étudiants et les autres et de favoriser leur intégration socio-économique, tout en prenant soin de leur proposer des objectifs de formation, liés aux disciplines et aux professions, qui, eux, demeurent fondamentalement les mêmes pour tous. Sans discrimination, ni privilège.

Trottier, C., Cloutier, R. and Laforce, L. (1994) Typology of vocational integration for university graduates. *Canadian Journal of Higher Education* **24** (2):71-86.

**Utility:** Classification guidelines of success

- \* **Abstract:** The objectives of this paper are: (1) to delimit the notion of vocational integration; (2) to formulate a vocational integration typology for university graduates, taking into account both the "traditional" method of integration (integration at the end of bachelor's degree and rapid stabilisation on the labour market) and other methods where integration occurs in phases and stabilisation on the labour market follows later; and (3) to demonstrate the empirical relevance of the typology. The data analysis was based on a data bank on the progression through school and labour market entry of all persons who received undergraduate degrees from Université Laval (Canada) in 1986. This analysis was not conducted in order to generalise the results for the Quebec population as a whole but rather to demonstrate the typology's relevance and empirical usefulness.

## 5. EXAMPLES OF GOOD PRACTICE

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### The Canada Millennium Scholarship Foundation

<http://www.millenniumscholarships.ca/en/main.html>

The Canada Millennium Scholarship Foundation is a private and autonomous organization established by an Act of Parliament in 1998 with an endowment of \$2.5 billion to help Canadians meet the challenges of a rapidly changing economy and society by creating opportunities for them to pursue their post-secondary education. The Foundation creates:

- opportunities to learn, by providing financial assistance to students and by piloting new ways to improve access to post-secondary education.
- opportunities to grow, by challenging students to make a difference in their schools and in their communities and by assisting them in developing their longer-term goals.
- opportunities to contribute, by challenging all Canadians to ensure that Canada's students are equipped to meet the challenges of the new millennium.

#### General description

The Canada Millennium Scholarship Foundation helps Canadians to meet the challenges of a rapidly changing economy and society by creating opportunities for them to pursue their post-secondary education. The Foundation administers three separate programs.

The Foundation's **Millennium Bursary Program** represents 95% of its endowment. The first bursaries were distributed in January 2000 to over 90,000 post-secondary students who demonstrated the greatest financial need. Students who apply for financial aid from the province or territory in which they reside are automatically considered for a bursary.

The Foundation's **Millennium Excellence Award Program** constitutes the remaining 5% of the endowment. The Foundation awarded almost 900 excellence awards for the first time in June 2000, on the basis of academic merit, community involvement, leadership, and innovation. The Foundation believes in the leaders of today and tomorrow and recognizes the need to support their contributions to our country. Excellence awards are not prizes for benchmarks achieved; they are investments in the development of Canada's leaders.

The Canadian Association for the World Petroleum Congresses (WPC), its Canadian National Committee and the 16th Canadian Organizing Committee were responsible for organizing the Congress of its 59 member nations from June 11 to 15, 2000. After the event, a substantial surplus remained. The organizers decided that the larger part of it should be used to create a scholarship fund for post-secondary students who demonstrate academic merit and a high level of financial need in areas of academic

pursuit relevant to the petroleum industry. Beginning in September 2002, the Foundation will distribute 200 scholarships worth \$3,000 each year until 2009 via its **World Petroleum Congresses Millennium Scholarship Program**.

## **Background**

The Foundation was announced in the 1998 Budget and created by an Act of Parliament in June 1998. It is part of the Canadian Government's economic plan to help students acquire the knowledge, skills, and qualifications needed to compete in the global economy and build a bright economic future for Canada. With this in mind, the Foundation's role is to provide greater access to post-secondary education for students who are motivated, but lack the financial resources to pursue higher education.

The Foundation was created as part of the Canadian Opportunities Strategy. It is responsible for the investment, management, and allocation of a \$2.5 billion endowment from the Government of Canada.

The Foundation is a non-profit organisation. It operates autonomously under the direction of its Board of Directors. The Directors are Canadians who were appointed following broad consultations. They are accountable to a board of 15 members, all of whom were chosen because of their knowledge of post-secondary education, the country's economic environment, and the needs of the economy.

## **Improved Access**

By international standards, Canada supports post-secondary education generously. In 1994, Canada devoted 1.6% of its Gross Domestic Product to post-secondary education – compared to an average of 1.0% for the 29 countries belonging to the Organization for Economic Co-operation and Development.

Nevertheless, student indebtedness has become a serious problem, limiting access to post-secondary education primarily for the following reasons:

- \* university and community college tuition fees have increased substantially over the past decade;
- \* the financial resources of students are shrinking. Even for students who work, real earnings tend to be low;
- \* students are borrowing more to finance their studies.

## **Improved Competitiveness**

The world is changing rapidly. Technology and capital have no borders. A skilled, knowledgeable workforce is required to respond to the global challenge.

To be competitive, Canada needs to be proactive. In the next 20 to 30 years, our country must train as many innovative and highly competent people as possible to create, manage, and expand companies which will participate globally and develop Canada's own economy.

The availability of post-secondary education to as many Canadians as possible is crucial to Canada's success.

## Documents

- "Why Don't They Go On?: Factors Affecting the Decisions of Canadian Youth Not to Pursue Post-Secondary Education," by E. Dianne Looker (2001).  
[http://www.millenniumscholarships.ca/en/research/looker\\_en.pdf](http://www.millenniumscholarships.ca/en/research/looker_en.pdf)
- "Deciding about Post-Secondary Education: Hearing the Voices of Non-Attendees" by COGEM Research Inc. – Liesette Brunson, Kerry Butt, and Yves Déziel (2001).  
[http://www.millenniumscholarships.ca/en/research/cogem\\_en.pdf](http://www.millenniumscholarships.ca/en/research/cogem_en.pdf)
- "Why Stop after High School?: A Descriptive Analysis of the Most Important Reasons that High School Graduates Do Not Continue to PSE," by Kelly Foley (2001).  
[http://www.millenniumscholarships.ca/en/research/foley\\_en.pdf](http://www.millenniumscholarships.ca/en/research/foley_en.pdf)
- As part of its research program, the Canada Millennium Scholarship Foundation in conjunction with EKOS research associates is conducting a national survey on the finances of Canadian university students. The *Year-long Study*, involving over 1,500 students across the country, began in September 2001 and will continue through to May 2002. This Report on Baseline results examines some of the data that was collected in the September 2001 wave, with particular reference to expectations of parental assistance, summer earnings and the use of credit cards and private lines of credit.  
[http://www.millenniumscholarships.ca/en/research/sfs\\_e.pdf](http://www.millenniumscholarships.ca/en/research/sfs_e.pdf)
- "Does Money Matter?: The Research Program of the Canada Millennium Scholarship Foundation."  
<http://www.millenniumscholarships.ca/en/foundation/publications/pareport/money.pdf>
- "Post-Secondary Access and Student Financial Aid in Canada: Current Knowledge and Research Gaps" by E. Dianne Looker and Graham S. Lowe. This review of current literature was commissioned by the Foundation as a precursor to launching its own research and evaluation efforts. The document was central to the Foundation's February 1, 2001, research workshop, which brought together governments, stakeholders and academic researchers to advise the Foundation on research priorities in access and student assistance.  
<http://www.millenniumscholarships.ca/en/foundation/publications/archivepres/feb062001>  
<http://www.millenniumscholarships.ca/en/foundation/publications/pareport/cprn-bkqnd.pdf>

- A summary of the February 1st workshop is available.  
<http://www.millenniumscholarships.ca/en/foundation/publications/pareport/cprn-summary.pdf>
- "Programs of the Canada Millennium Scholarship Foundation: Issues, Options, and Suggested Directions," by Dr. David C. Smith, December 21, 1998.  
<http://www.millenniumscholarships.ca/en/foundation/publications/pareport/ms-e.pdf>

## «Financial assistance for education» – Quebec government program

<http://www.afe.gouv.qc.ca/english/indexAng.asp>

### **Mission**

Financial assistance for education/Aide financière aux études (AFE) has been providing services as an independent unit since April 8, 1997. In keeping with the strategic plans adopted by the Québec government and the Ministère de l'Éducation du Québec, AFE's mission is to improve access to higher education and secondary school vocational education by providing students with financial assistance. AFE must ensure that students are awarded all the assistance to which they are entitled under the *Act respecting financial assistance for education expenses* and the Regulation thereunder.

AFE must do all that is necessary to process applications diligently, promptly and fairly. In so doing, it must collaborate with educational and financial institutions. It must also ensure that its activities are conducted with care and with the greatest concern for the transparent, effective management of public funds. To achieve its mission, AFE relies first and foremost on the competence and commitment of its personnel.

### **Values**

AFE also relies on the organizational values that it shares with its personnel, the most important of which are team spirit, collaboration, joint action and partnership. AFE administrators are also expected to provide people-centred participatory leadership that encourages mobilization through, among other things, results-based management. Goals must be clear, known and shared.

### **Activities and Products**

AFE is responsible for two main activities: awarding financial assistance and managing loans. The two main products of the first activity are loan certificates and bursaries. The three main products of the second activity consist in the payment of interest, the cancellation or reimbursement of claims filed by financial institutions and the negotiation of repayment agreements with former students.

### **Program history**

Since student financial assistance was first introduced some 60 years ago, the total amount awarded per year has risen from \$9,000 to close to \$800 million. Here is a brief history of the colossal growth of student financial assistance in Québec.

#### **1937**

Various youth assistance programs were launched in 1937 following agreements between the federal and provincial governments in order to reduce joblessness among young people. These programs were designed to help young people develop skills and, more specifically, to train mining, industrial and agricultural workers. During World War II, the emphasis was on training workers for the war industries.

### **1940**

For the first time, 60 students at various Quebec universities received financial assistance in the form of bursaries. They were each awarded \$150, for a grand total of \$9,000.

### **1942**

As of 1942, students were required to repay, within the year following the end of their studies, half of the amount they received from the government. A committee consisting of a representative from each university chose bursary recipients from among the most deserving and most needy students. Recipients who failed at the end of the year were not entitled to financial assistance the following year.

### **1943**

As of 1943, bursaries were awarded to nursing students. The amount of these bursaries was limited to \$100 per year per person, since room and board were provided by the hospitals. To receive their bursaries, the students had to agree to work for one year in a hospital or in a public health service.

### **1960**

The youth assistance program was extended to include students attending child-care training schools, classical colleges, family institutes and normal schools (teachers' colleges).

### **1962**

In 1962, just over 20 years after the creation of the program, 32,000 students received financial assistance and the budget had grown to \$9 million. The maximum awarded was \$500 per person. Those who did not live with their parents were entitled to an additional 40 per cent, which they also had to repay.

### **1964**

The Ministère de l'Éducation du Québec (MEQ) was created and student financial assistance was placed under its jurisdiction.

### **1966**

The Student Loans and Scholarships Act was adopted in December 1966. Under this Act, the total amount of assistance awarded to a student was to include a loan and a bursary. Students received a loan certificate to be redeemed by a financial institution and a bursary cheque. That year, 48,000 students qualified for financial assistance under the new Act and borrowed \$26,200,000 from 2,400 financial institutions.

### **1974**

The first reform of the legislation governing student financial assistance provided an opportunity to reaffirm certain basic principles:

- No one should be denied the opportunity to pursue higher education because of a lack of financial resources.
- The prime responsibility for the funding of a student's education must remain with the student and, as the case may be, with his or her parents, sponsor or spouse, since government assistance is, by nature, supplemental.
- Financial assistance must first be awarded in the form of a loan before it can be available in the form of a bursary.

### **1990**

As part of the second legislation reform, certain changes were made to the Loans and Bursaries Program in order to encourage students to persist until graduation and to complete their studies within the normal time limits. Improvements were made to make the program more responsive to the needs of students with dependent children.

It was also determined that, after a given number of terms, financial assistance was to be awarded in the form of loans only for two additional terms, i.e. recipients no longer qualified for both loans and bursaries.

The same year, the MEQ provided students with two routes for filing appeals, i.e. the Review Bureau and the Examination Committee for Exceptional Cases.

### **1994**

In 1994, students enrolled in secondary school vocational education programs became eligible for financial assistance, which until then had been reserved for postsecondary students.

### **1995-1996**

In 1995-1996, the MEQ awarded \$532,700,000 in loans and \$253,400,000 in bursaries to 163,000 students.

### **1996-1997**

Amendments were made to the *Act respecting financial assistance for students* on December 22, 1996 and to the Regulation thereunder in April 1997. These amendments brought the following changes:

- To be considered independent (i.e. self-supporting), students were now required, among other things, to hold a bachelor's degree where they were previously required to have earned 90 credits.
- Limits were set as to the total amount students could borrow throughout their studies. These limits varied according to the level of education (secondary school, college or university) and the type of program (vocational or technical versus general education, undergraduate versus graduate). New limits were also set for certain specific programs.
- The loan amount awarded to out-of-province students for tuition fees was limited to \$6,000 per term as of the 1998-1999 academic year.

- The period of time for which a person who is no longer studying full-time is exempted from making payments on his or her student loan (the "exemption period") was reduced from seven to six months.
- The Debt Remittal Program was abolished.
- The Deferred Payment Plan was modified. Under this Plan, an additional grace period is granted to students who, at the end of their exemption period, are unable to start making payments on their student loans. The MEQ would now pay the interest on their loans for up to 18 months rather than pay both the principal and interest.
- A new fast-track procedure was set up so that income security recipients returning to school could receive an advance on their student loans.
- Changes were made to the appeal procedures available to students.
- The procedure for claiming reimbursements for child-care expenses and practicum expenses was streamlined.

### **1997-1998**

On April 8, 1997, the Direction de l'aide financière aux étudiants became an independent service unit and its name was changed to Aide financière aux études. The concept of "independent service unit" is derived from results-based management. Each year, the unit must produce three documents: a management agreement, an action plan and an annual report.

Changes to students' allowable expenses were made following the introduction of the family allowance by the Régie des rentes du Québec. The needs of children under 18 years of age would now be covered by the new allowance.

In September 1997, a committee of experts chaired by Claude Montmarquette submitted its report on student loan repayment to the Minister of Education.

In December 1997, the Québec government passed Bill 170 amending the Act respecting financial assistance for students. In April 1998, the Cabinet approved the Regulation respecting financial assistance for education expenses.

The main changes to the rules for awarding financial assistance included:

- lowering the amount of the contribution expected from a student's spouse or parents when their income is low
- granting an additional \$2,200 exemption to the spouse or parents of a student with a major functional disability
- abolishing the \$150 penalty charged to students for late applications; granting a \$5,000 exemption to merit scholarship recipients without affecting the amount of their student loans or bursaries
- changing the Deferred Payment Plan to extend the qualifying period; creating a new Loan Remission Program

### **1998-1999**

Under the new provisions of the Regulation respecting financial assistance for education expenses, students were exempted from paying the interest on the principal loaned by the financial institution until their interest assignment date. From this date until the end of their exemption period, students are responsible for the interest but may have it capitalized, i.e. converted into principal.

Recipients of financial assistance under the Loans and Bursaries Program were granted tax relief while repaying their student loans. The Québec government introduced a non-refundable tax credit corresponding to 23% of the interest paid by former students on their student loans. The federal government followed suit with a 17% tax credit.

The Regulation was amended so that income earned as an elections officer is no longer taken into consideration.

### **1999-2000**

Calculations to determine the amount of the student contribution were modified to give students a \$5,000 exemption for bursaries and scholarships from other organizations. However, 100% of any amount over and above the first \$5,000 is taken into account.

For all nonsubsidized college programs, financial assistance is limited to \$3,100 per term in the form of a loan.

A new Loan Remission Program is launched. Under this program, students who completed their program within the normal time frame and who received a bursary each year since the beginning of their undergraduate studies qualify for a 15% reduction of their student loans. These students may qualify for an additional reduction if they also received a bursary each year while in college.

Improvements are made to the Deferred Payment Plan as of May 1, 1999. Under the improved plan, individuals in a precarious financial situation, i.e. whose gross monthly income is less than \$1,105, are exempted from making payments on their student loans for a period of six consecutive months. They may be on the plan for a total of 24 months over the five years following the end of their exemption period, and are not required to repay the interest paid by the government on their behalf while they were on the plan.

As of September 1, 1999, the amount allowed for childcare expenses for children 2 years of age on September 30 is \$25 per week. The same amount is allowed for children under 2 years of age as of September 1, 2000.

These changes were made in light of the provisions of the Québec Family Policy.

The amounts allowed for weekly living expenses, practicum expenses and transportation expenses as well as the allowance for students in outlying areas were all increased in 1999-2000.

### ***Millennium Scholarships***

Québec students have access to about \$70 million each year under the millennium scholarships agreement. Half of this amount is used to fund direct services to students in Québec colleges and universities. The other half is used to reduce the debt load of students receiving financial assistance under the Loans and Bursaries Program.

Each year, AFE selects millennium scholarship recipients from among students with the greatest financial need who are enrolled in the second or a subsequent year of a college or an undergraduate university program and who received a bursary under the Loans and Bursaries Program.

The bursaries awarded to these recipients are covered in full or in part by funds from the Millennium Scholarship Foundation. These students do not receive additional assistance; rather, the funds for their bursaries come from a different source. The amounts thus released are used to lower the student loan ceilings for some 82,000 beneficiaries of the Loans and Bursaries Program.

*There is no application procedure for the millennium scholarships.*

### ***Amendments to the Regulation***

Certain sections of the Regulation respecting financial assistance for education expenses were amended to increase certain amounts allowed for living expenses and the maximum bursary amounts.

## **2000-2001**

### ***Year in Review***

This year, Aide financière aux études (AFE) has examined roughly 150,000 applications for student loans, 88,000 applications for bursaries, 7,400 refund claims for eyeglasses or contact lenses, 5,900 applications for summer language bursaries, 91,000 forms reporting changes in a person's circumstances, 24,000 requests for additional information and 7,900 applications for a computer loan guarantee.

### ***Number of Loan and Bursary Recipients and Average Amount Awarded***

In 2000-2001, 128,383 persons received financial assistance under the Loans and Bursaries Program, for a total of \$532.6 million. Of this number, 71,437 received a loan only for an average amount of \$2,491; 56,445 received both a loan and a bursary for an average amount of \$6,240; and 501 received a bursary only for an average amount of \$4,780. The average loan totalled \$2,707 and the average bursary, \$3,533.

### ***Loan Remission Program***

Students who graduate from a technical education program with a Diploma of College Studies now qualify for the Loan Remission Program.

### ***Deferred Payment Plan***

The eligibility ceiling for the Deferred Payment Plan was raised to \$1,125 and higher gross monthly income limits were set to accommodate applicants with family responsibilities.

### ***Computer Loan Guarantee Program***

To qualify for the Computer Loan Guarantee Program, students must now be receiving financial assistance under the Loans and Bursaries Program. The maximum amount guaranteed is now \$2,000 and for students enrolled in programs for which a portable is required, the maximum is \$3,000.

### ***Employment Income***

The amount of the student contribution is now calculated differently: only 50 per cent of the employment income in excess of the minimum contribution is taken into account.

### ***Bursaries for Studies Outside Québec***

Students may now qualify for a bursary although they are studying in a Canadian province other than Québec. The college or university program must be recognized and subsidized by the province concerned and there must be no admission quota for the corresponding program in Québec.

### ***New Criterion for Consideration as an Independent Student***

A parental contribution is no longer required in the case of students who have been in university in Québec for at least three years and have successfully completed six terms of full-time study and earned 90 credits in the same program.

### ***Bursary Overpayments***

Students are no longer required to repay bursary amounts that were overpaid due to an administrative error they could not reasonably have been expected to detect.

### ***Extended Studies***

Students are now entitled to postpone the repayment of their student loan debt for a period generally equivalent to two terms if they are temporarily interrupting their studies because of a pregnancy, the birth or adoption of a child or a temporary disability.

### **2002 - The new Loans Program for Part-Time Studies is available.**

<http://www.afe.gouv.qc.ca/english/vdirConditionsAdmissibilitePartielAng.asp>

## ***Scientifines*– An Innovative Approach to Foster Interest in Science and Technology Among Young Girls**

*Scientifines* is a non-profit organization that has been working for eleven years to give young girls aged 9 to 12 in south-west Montreal the opportunity to learn more about science and technology. It uses an innovative approach to encourage these young persons, all from modest, multiethnic social backgrounds, to continue their studies and develop interests and skills in disciplines involving science and technology.

The minister has had this to say about *Scientifines*: “The approach developed by this program is doing more than help young girls develop greater interest in science and technology. It is also motivating them to continue with their studies and acquire new skills, thus contributing to our efforts to lower the school drop-out rate. Above all, *Scientifines* is giving these young persons the kind of self-confidence that will form a solid base for helping them achieve their full potential.”

*Scientifines* holds four activities a week for young girls in the program. They include homework assistance and various outings, each on a different science or technology theme. Since last September, 85 girls have registered in *Scientifines*, and on average, 25 girls are attending each activity.

In June 2000, the Quebec government awarded *Scientifines* a \$70,000 grant under the program *Assistance for the Upcoming Generation of Students in Science and Technology*, administered by the Ministère de la Recherche, de la Science et de la Technologie (MRST). *Scientifines* is using this grant to support all of its activities. The grant should also help the program to expand to other areas in addition to the Saint-Henri and Petite-Bourgogne districts, where most of its activities are now concentrated. *Scientifines* hopes in this way to offer its activities to young girls from other parts of Montreal and perhaps elsewhere in Quebec.

## **SEUR Project**

*Sensibilisation aux Études Universitaires et à la Recherche* (program to promote university studies and research)

<http://www.seur.qc.ca/index.html>

### **Objective**

Université de Montréal has started a project the main objective of which is to promote its programs of study to high school students (levels 3, 4 and 5, in Quebec). The project provides these students with information on the university's programs and puts them in contact with the university's research teams, all to foster their interest in university studies.

An important component of the project consists in week-long learning sessions for the students on the university campus during the summer.

### **Activities**

- Noon presentations and debates given by university students or teachers in the high schools during the school year.
- Dissemination of communications tools to help students in the target high school group explore a specific area or discuss it with the students and teachers from the university.
- Support from post-graduate students and research professors on research projects by students in the target group (e.g., science clubs).
- Visits to the university's research laboratories by the students in the target group.
- Free week-long learning sessions at the university for the students in the target group.

The SEUR project gives these high school students the opportunity to meet with the university's research teams during the school year, by way of two different approaches:

#### **Visits to research laboratories**

Opportunity to visit certain research labs at the university, through specially designed tours for small groups of five or six students.

#### **Researcher/Student Mentorship**

Sponsorship by researchers at the university (or one of its affiliated research centres) for an Expo-Sciences project or any other school or research project on a subject of interest to the high school students. Once an agreement is worked out between the researcher and the student, the researcher will make his or her expertise and lab facilities available to the student.

## RÉUSSITE Magazine

<http://www.uquebec.ca/reusite/>

The result of collaboration between the Université du Québec establishments and a project supported by the *Vice-présidence à l'enseignement et à la recherche* (Vice Chair of Teaching and Research), RÉUSSITE is an on-line magazine aimed at promoting student success in all its dimensions by taking into account the situation as it stands at the Université du Québec network. To this end, its objective is to introduce those who are working towards this goal, be they professors, students or any other participant of university life, and to emphasize their achievements and initiatives. These initiatives include, among others, new modes of delivery, university pedagogy, student training but also the research and analysis which offers a better understanding of the student success issue. Information and communication technologies are obviously of great interest to the magazine because of the effect they have on student training and the way they can help to enhance the training. This magazine gives students the opportunity to voice their ideas and questions in a learning environment beneficial to all.

The [Editorial Board](#) for RÉUSSITE is comprised of representatives of the establishments that make up the Université du Québec network.

RÉUSSITE appears on the *Vice-présidence à l'enseignement et à la recherche* (Vice Chair of Teaching and Research) web site which also manages the production side of things. Its electronic format provides continuous broadcasting and updates of the available information at variable frequency, yet all the while offering varied communication options. The writing team hopes to eventually add an interactive feature, according to demand, that will promote on-line contact, in either synchronous or asynchronous mode.

## Consortium on Student Success in Higher Education

The *Direction du recensement étudiant et de la recherche institutionnelle* (Board of student registration and institutional research) of the Université du Québec recently received a letter from Mr. Sylvain Simard, Minister of Education. This letter was sent to inform the Board of the existence of a \$70,000 annual grant, spread out over five years, which is to be used for the establishment and operation of a research and information consortium on student success in higher education. This consortium, consisting of professors and researchers from universities and colleges all over Quebec, aims to collect, analyze and disseminate information relating to strategies for success assistance and their evaluation.

With the signing of the performance contracts for universities and the blueprints for success for Quebec colleges, the issue of educational success and more importantly, the efficiency of higher education institutions are among the major concerns as much for the government as for the education community. However, it must be kept in mind that the work that has been achieved by many research teams concerning this theme dates back to more than twenty years. This explains why many assets exist today, be they in the form of a set of data on the students' progress, tools to analyze and make the most of this data for administrative purposes or activities that bring about improved student training. Certain concepts related to a student's path have emerged and have become an integral part of institutions wishing to pave the way to academic progress and support the students as they achieve educational success and these concepts are: dropping out, institutional departures, attrition, either perseverance or the graduation rate. For instance, we should mention the extensive inquiry that was carried out by the Université du Québec about the indicators of the conditions relative to the pursuit of education (ICOPE) in which the first findings were published during the fall of 2000.

The consortium will therefore be able to draw from this corpus of information in order to create a real bank of "knowledge" on success, to encourage the best use of the information in context, to support the revision of the success strategies and to promote the measures which have proven successful.

The consortium is already profiting from the assured commitment of many institutional partners such as the Université du Québec and its establishments and the Centre for Research in Science and Technology (CIRST). It can also count on the support of individual partners from Concordia University, Université Laval and Cégep St-Laurent. Discussions are currently under way with a number of other institutions and organizations looking to be part of the consortium. Among the many activities the research team wishes to pursue or develop, there is ICOPE's work, the next generation of science and technology, RÉUSSITE, the on-line magazine devoted to the promotion of strategies that encourage student success in the Université du Québec network and the organizing of many activities destined to promote and spread the word about the road to a diploma.

The annual funding of \$70,000 given by the Quebec Department of Education will allow the consortium to benefit from an individual's services; this person will be responsible for overseeing the co-ordination and development of its activities. It should be noted that the partners wish to profit from their kick off by soon submitting a request for funding to the Social Sciences and Humanities Research Council of Canada (SSHRC) in order to carry out their project to its full potential.